# Wisconsin – Lake Michigan Restoration Priorities Workshops

Proceedings

Green Bay, Wisconsin August 17, 2004

Milwaukee, Wisconsin August 18, 2004













This publication was produced by the University of Wisconsin Sea Grant Institute under a grant from the National Sea Grant College Program, National Oceanic & Atmospheric Administration, U.S. Department of Commerce, in cooperation with the Great Lakes Commission. Publication Coordinator: Stephen Wittman. Federal Grant No. NA16RG2257, Project No. C/C-1. Pub. No. **WISCU-W-04-001**.

First Printing: February 2005 Printed in the USA

This publication is available free of charge from:

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## Acknowledgements

The Great Lakes Commission expresses its sincere thanks to University of Wisconsin Sea Grant Institute, the Council of Great Lakes Governors, the Wisconsin Department of Natural Resources and Wisconsin Costal Management Program for their efforts as partners in hosting these workshops. Special thanks are in order for conference speakers: Anders Andren, director of the University of Wisconsin Sea Grant Institute; Chuck Ledin, director of the Wisconsin Department of Natural Resources Great Lakes Office; Bud Harris, professor emeritus of natural and applied sciences at University of Wisconsin-Green Bay; Peter Johnson, senior program manager for the Council of Great Lakes Governors; and John Janssen, senior scientist at the University of Wisconsin-Milwaukee Great Lakes WATER Institute.

The commission appreciates the efforts of Lake Michigan Workshops Planning Committee in organizing these outstanding events: Anders Andren, James Hurley, Stephen Wittman, Victoria Harris and James Lubner of the University of Wisconsin Sea Grant Institute; Charles Ledin and Linda Talbot of the Wisconsin Department of Natural Resources Office of the Great Lakes; and Michael Friis and Alberto Vargas of the Wisconsin Coastal Management Program.

The Great Lakes Commission also recognizes the efforts of Dave Naftzger and Peter Johnson of the Council of Great Lakes Governors, and the assistance of the breakout session facilitators: Jenny Erickson and Kendra Axness of University of Wisconsin-Extension; Kathy Schmidt, John Karl, Stephen Wittman and Jim Hurley of the University of Wisconsin Sea Grant Institute; Mike Friis of the Wisconsin Coastal Management Program; and Kate Barrett, Marsha Burzynski, Diane Figiel, Vic Pappas, Shaili Pfeifer, Rhonda Volz, Kelley O'Connor and Jim Baumann of the Wisconsin Department of Natural Resources. It also thanks Stephen Wittman of the University of Wisconsin Sea Grant Institute and Jon Dettling of the Great Lakes Commission staff for coordinating the compilation, editing and production of these proceedings.

Dr. Ronald Baird, director of the National Sea Grant College Program, warrants special recognition for his support of this initiative and for facilitating financial support for this workshop series.

Finally—and most importantly—thanks to all who joined us in Green Bay and Milwaukee to share their thoughts and recommendations.

Sincerely,

Michael J. Donahue, President/CEO Great Lakes Commission

Anders W. Andren, Director, Sea Grant Institute, University of Wisconsin-Madison

**Charles Ledin,** Director, Great Lakes Office, Wisconsin Department of Natural Resources

Michael Friis, Manager, Coastal Management Program, Wisconsin Department of Administration

## **Executive Summary**

This proceedings document presents the outcome of a pair of half-day workshops held August 17-18, 2004, in Green Bay and Milwaukee, Wisconsin. These workshops were a cooperative effort of the Great Lakes Commission, Council of Great Lakes Governors, University of Wisconsin Sea Grant Institute and Wisconsin Coastal Management Program. The meeting brought together a range of participants from various Great Lakes constituencies to provide feedback on the governors' priorities for restoration of the Great Lakes ecosystem and on the coordinative processes needed to achieve these priorities.

These meetings were part of a series of similar events conducted throughout the Great Lakes region. The Council of Great Lakes Governors has identified nine priorities for restoring and protecting the Great Lakes. The workshop series, supported by the National Sea Grant College Program, provides an opportunity for Great Lakes constituents to review these priorities and inform their further development and implementation. Workshop outcomes are being shared with the region's governors, premiers, other public officials, meeting participants and the larger Great Lakes community. A primary objective is to inform and advance the restoration efforts of the region's leadership.

The results of these two focus group-style workshops involving over 100 Wisconsin citizens indicates that—while all of the nine Great Lakes restoration and protection priorities developed by the Council of Great Lakes Governors are important—the four most critical priorities for Wisconsin waters of Green Bay and Lake Michigan, and the specific actions needed to address them, are:

- **1.** Ensure the sustainable use of water resources while confirming state authority over the use and diversions of Great Lakes waters:
  - Affirm state/local sovereignty regarding Great Lakes water
  - Pass laws to require water conservation
  - Guarantee adequate groundwater replenishment within the Great Lakes watershed
  - Establish specific goals or objectives for reductions in storm water runoff
  - Ensure return of water to basin
  - Educate the public on significance of water cycle, recharge areas, aquifers, watershed, and groundwater

## 2. Control pollution from diffuse sources into water, land and air:

- Establish environmental regulations that can be implemented and enforced
- Adopt a watershed approach and stop nonpoint-source pollution and wetland loss
- Promote groundwater replenishment
- Fund long-term monitoring to ensure that problems are actually being solved (accountability)
- Support education
- Focus on land use as a way to improve water quality in the Great Lakes

# **3.** (*tie*) Enhance fish and wildlife by restoring and protecting habitats and coastal wetlands:

- Apply Coastal Zone Management more broadly within the watershed (not just along the Great Lakes coast)
- Identify important habitat and conservation areas for protection
- Locate and protect groundwater recharge areas for Great Lakes

## Stop the introduction and spread of non-native aquatic invasive species:

- Strengthen local and federal invasive species laws
- Regulate ballast waters

In addition—noting the need for better K-12, university and public education on all Great Lakes issues—citizens at both workshops suggested that it be added as a tenth protection and restoration priority, or that the need for greater public and formal education be made explicit in each of the governors' nine priority areas (see Appendices D and E).

Feedback received during a two-week public comment period tended to confirm the priority selections made by workshop participants (Appendices F and G). The respondents generally emphasized the same concerns about sustainable use of Great Lakes water and diversions, pollution and water quality, and non-native invasive species issues.

The University of Wisconsin Sea Grant Institute also partnered with the Minnesota Sea Grant Program in hosting a half-day workshop on June 30, 2004, in Duluth, Minnesota. This meeting, with a focus on western Lake Superior and a similar agenda, was attended by more than 100 Wisconsin and Minnesota citizens. The results of this workshop indicated that, while invasive species and pollution from diffuse sources were important, the two most important priorities for the Wisconsin and Minnesota waters of Lake Superior and some actions needed to address them are:

## 1. Enhance fish and wildlife by restoring and protecting habitats and coastal wetlands.

- Identify important aquatic and coastal watershed habitat in need of protection and/or restoration, including migratory bird habitat
- Improve planning and enforcement of local land-use policies with a focus on long-term watershed/ecosystem protection
- Coordination of programs among jurisdictions is essential to success
- Education about habitat protection and restoration issues is the number one priority

# 2. Adopt sustainable use practices that protect environmental resources and may enhance the recreational and commercial value of our Great Lakes.

- Define "sustainable use" and provide for a comprehensive growth management strategy that protects the Lake Superior basin
- Provide incentives for best management practices to address watershed and coastal development issues at the local level
- Economic valuations must include ecological considerations and value sustainability

Nearly every breakout group at the Lake Superior workshop likewise stressed that the need for education and outreach on these issues should be stated explicitly the governors' priorities. The outcomes of this workshop are presented in a separate proceedings and are not fully included here. The summary and conclusions of that workshop are reprinted in Appendix H.

The workshop organizers are very satisfied with the focused, high-quality feedback received from the 100-plus individuals who participated in the Green Bay and Milwaukee workshops, and they are pleased to have contributed to this effort to build consensus and unity among the eight Great Lakes governors for advocating for long-term, large-scale federal funding to restore and protect the Great Lakes.

The Great Lakes are a freshwater resource without equal in the world. These inland seas are the regional economic cornerstone of the United States and Canada, and they provide high quality drinking water for more than 25 million of both nations' residents. The citizens of Wisconsin and the other Great Lakes states—indeed, all Americans—share a special responsibility to preserve and protect this treasure for future generations. This Great Lakes restoration and protection workshop series—an unprecedented partnership between the Great Lakes Commission, Great Lakes Sea Grant Network, the Council of Great Lakes Governors and relevant agencies in each state—is a demonstration of how seriously we take that responsibility.

## I. Background

A number of bills have been introduced in Congress that may provide large-scale, long-term funding for state-implemented programs for restoring and protecting the Great Lakes. In a May 14, 2004, letter to leaders of the U.S. Senate and House appropriations committees, the Council of Great Lakes Governors requested a series of appropriations using as their organizing principle nine broad priorities for future Great Lakes restoration and protection efforts that had been agreed upon in October 2003. (Appendix C).

The Green Bay and Milwaukee workshops were two in a series of similar events held throughout the Great Lakes basin as part of a collaborative project between the Great Lakes Commission and the Sea Grant programs in the Great Lakes region. These workshops are intended to solicit the public's input on the most critical Great Lakes restoration and conservation needs of each state. These workshops were conducted in collaboration with each state's governor's office and relevant state agencies.

This region-wide effort, funded by the National Sea Grant College Program, is directed at advancing Great Lakes ecosystem restoration efforts through the development of restoration priorities and a regional planning process for implementing those priorities. The goal of these workshops was to build consensus and unity among the citizens and leaders of the eight Great Lakes states for action items in support of the governors' priorities and for long-term, large-scale programs to restore and protect the Great Lakes. The results will be shared with all Great Lakes stakeholders.

Project collaborators recognize that development of a Great Lakes restoration strategy must be based upon sound science. It must proceed with a clear understanding of ecosystem conditions and objectives, relevant research activity, and the science/policy/management linkages needed to achieve the strategy's vision. These workshops, along with corresponding workshops in other Great Lakes jurisdictions and a companion project by the Northeast-Midwest Institute, will provide the region's leadership with needed public input as well as detailed, science-based information as they continue their work to implement the restoration priorities.

The workshops were held on August 17, 2004, at the KI Convention Center in Green Bay and August 18 on the University of Wisconsin-Milwaukee campus. They were organized and hosted by the UW Sea Grant Institute and the Wisconsin Coastal Management Program (CMP) (Appendix I). The Wisconsin Department of Natural Resources (DNR), CMP and UW Sea Grant distributed more than 400 individual invitations to key constituents and constituent groups (Appendix J). Thousands more were informed via announcements on the UW Sea Grant, DNR, CMP and Great Lakes Commission websites, email listservers, and stories in newsletters and state news media.

At both workshops, brief introductory remarks and an overview of the workshop objectives were given by Professor Anders Andren, director of the University of Wisconsin Sea Grant Institute, and Dr. Michael J. Donahue, president/CEO of the Great Lakes Commission. Following this, brief presentations were made on the Council of Great Lakes Governors' Priorities Task Force and a summary of current restoration and protection issues for Lake Michigan. At the Green Bay

event, these brief presentations were made by Charles "Chuck" Ledin, director of the Wisconsin Department of Natural Resources Great Lakes Office, and Hallett J. "Bud" Harris, professor emeritus of natural and applied sciences at University of Wisconsin- Green Bay. At the Milwaukee event, they were made by Peter Johnson, senior program manager for the Council of Great Lakes Governors, and John Janssen, senior scientist at the University of Wisconsin-Milwaukee's Great Lakes Wisconsin Aquatic Technology & Environmental Research (WATER) Institute.

After these introductory comments, the meetings divided into three sessions of breakout groups interspersed with plenary reporting-out sessions. The basis for discussion in the breakout groups was the list of nine basin-wide Great Lakes restoration priorities announced by the Council of Great Lakes Governors on October 1, 2003 (Appendix C). During the first breakout session, groups discussed Great Lakes protection and restoration in broad terms and focused on the highest priority issues from the governors' list. Each of the groups was tasked with discussing the following three questions:

- What are the major themes or needs for Lake Michigan and where should they be placed within these nine priority areas?
- Are there other conservation and restoration priorities for Lake Michigan's basin that you wish to share with the Council of Great Lakes Governors?
- What are the top three priorities from the Governors' list?

Following reporting-out from this session, workshop participants participated in two breakout sessions focused on individual priority areas. These sessions were repeated, allowing participants to join in discussion on two of the nine priorities. Written comments were encouraged, allowing participants to comment on all priorities. The discussion points for these breakout sessions were:

- What are some action items specific to Lake Michigan for each priority?
- What interest groups should be involved in implementing these action items? (Includes groups such as local government, business and industry, education, resource management agencies, etc.)
- What are some of the measures of progress and success in satisfying this priority?

The objective of the workshops was to capture the diversity of thoughts throughout the state on Great Lakes restoration needs and possible action items for achieving them. Participants were invited to also submit written comments and take comment forms to distribute to others. A statewide news release and email distribution was also made by Sea Grant, DNR and CMP inviting feedback from all interested members of the public unable to attend the workshops. Comments were accepted via by email, website, fax or mail over a two-week period ending August 31. Comments received through these means are also included in these proceedings.

A total of 106 people participated in the workshops (Appendix A), representing harbors and ports, community and public service organizations, environmental engineering and lakeshore development businesses, recreational and commercial fishing interests, educators, public

universities, environmental and conservation groups, Indian tribes, city and county government, and concerned state and federal government agencies. All of these individuals were actively engaged in participating in a focus group numbering 10 or fewer people, each led by a preselected discussion facilitator.

Section II provides an overview of the plenary presentations from the Milwaukee and Green Bay workshops. Section III presents outcomes of the breakout group discussions. A summary and conclusions are offered in Section IV.

The appendices contain a list of participants; the workshop program; the governors' letter to Congress announcing restoration priorities; the summary notes taken during the breakout sessions; written comments that were submitted during and after the meeting; feedback from the website survey; outcomes and conclusions from the Minnesota-Wisconsin Lake Superior workshop; planning committee members; and a list of workshop invitees.

## **II. Presentations**

Both workshops began with welcoming remarks from Anders Andren, a professor of environmental chemistry at the University of Wisconsin-Madison and director of the UW Sea Grant Institute. Andren explained that the diversity of Great Lakes issues across the state of Wisconsin warranted holding separate workshops in three different areas of the state. One was held previously in the Lake Superior area in Duluth in cooperation with partner organizations in Minnesota, while these two workshops were being held near the Lake Michigan coasts of Wisconsin.

Andren briefly discussed the two proposed bills in the U.S. Congress concerning Great Lakes restoration. To inform the development of a broad restoration plan, whether under this legislation or otherwise, the Council of Great Lakes Governors jointly developed a set of nine priorities for regional ecosystem restoration. The workshops are an effort to incorporate broad public input into the process of planning for Great Lakes restoration, he said.

Recognizing that the word "restoration" means different things to different people, Andren presented several of the definitions being used. He noted four common themes present in most definitions of restoration: (1) recovering original ecological processes; (2) integration of the water-side and the land-side; (3) establishment of a resilient and resistant system, and (4) the recognition of the impossibility to entirely recreating historical conditions.

Following Andren's welcome, Dr. Michael J. Donahue, president and CEO of the Great Lakes Commission, offered an overview of the current status of restoration programs and planning in the Great Lakes basin. He described the role of the Great Lakes Commission and discussed its primary duties of communication, policy research and development, and advocacy for its member states. Donahue explained that restoration initiatives have been ongoing in the basin for decades but have been sporadic and piecemeal.

There is a growing interest in the region for elevating and integrating these efforts into a single, inclusive initiative. A series of workshops throughout the region, of which these workshops are a part, is intended to advance ecosystem restoration and protection efforts by identifying implementation opportunities. Besides the workshop series, a research component and a synthesis activity are being planned. As a whole, these components will have significant application for policy making.

Donahue explained the format of the workshop and the intent to capture and pass on all expressed ideas. He emphasized the need for restoration planning to proceed with an open and inclusive process. The importance of incorporating local ideas and local actions into regional initiatives was emphasized. Sharing and integrating ideas from each jurisdiction is essential in having a balanced regionwide initiative.

At the Green Bay workshop, Chuck Ledin, director of the Wisconsin Department of Natural Resources Great Lakes Office, presented the Council of Great Lakes Governors' restoration priorities. He noted the large number of groups and organizations in the region that have

developed plans for Great Lakes environmental restoration. Ledin reviewed the genesis of the Council of Great Lakes Governor's Restoration Priorities Task Force and the process the governors used to develop a list of basinwide priorities for achieving Great Lakes restoration. One motivation for this was to develop a restoration agenda that would combine and be inclusive of these many existing plans.

Ledin noted that the effort to establish a set of clear and concise priorities is merely the first stage in a long process. It was recognized that, although "restoration" involved the notion of regaining a prior state, there is a need to look forward rather than backward in the planning process. The governors' priorities are described in a letter to congressional leaders dated May 14, 2004, which is provided in Appendix C of this proceedings document. Ledin went on to review the nine priorities that were identified by the governors.

During the Milwaukee workshop, Peter R. Johnson, senior program manager for the Council of Great Lakes Governors, delivered a presentation similar to Ledin's. Johnson emphasized the role of abundant clean water and economic opportunities in drawing people to the region in the past. He pointed out the need to maintain these characteristics to preserve the region's high quality of life.

Johnson noted that the governors in the region are very supportive of Great Lakes protection and restoration and of the present series of workshops to inform that process. He also noted that prior workshops within the region found a great amount of similarity of concerns among jurisdictions, as well as some unique characteristics in each. Perhaps one of the most valuable aspects of this workshop initiative, he said, is its contribution in helping the region speak with a single voice on restoration issues.

At the Green Bay event, Bud Harris, professor emeritus of natural and applied sciences at the University of Wisconsin-Green Bay, discussed Green Bay and Lake Michigan restoration and protection issues. Harris discussed some historical events that have shaped the current condition of these water bodies. There were many instances in the past that led to degradation of the bay's water resources, including discharges of raw sewage. Other formative events included the introduction of nonindigenous species, persistent toxic substances, and increased levels of sedimentation and suspended solids.

Correcting these problems is the underlying theme of restoration efforts. Harris emphasized nonpoint-source pollution as a particularly difficult problem to overcome because of the very diffuse nature of these sources. Increased runoff and suspended solids has greatly impaired Green Bay's littoral zone and submerged aquatic vegetation.

Harris also emphasized the need to set achievable and observable restoration goals, saying such goals should focus on ecosystem qualities rather than on specific actions. He gave an example concerning suspended solids by defining a potential goal of reducing suspended solids to a certain level. He explained how progress toward such a goal might be tracked as actions are taken to achieve it, noting the need for quality control on monitoring efforts and suggesting that goals be set and progress be tracked at the watershed level. Harris pointed out the dependency of

a strong economy on a functioning ecosystem, and he emphasized the need to make this point clear to the public and policy makers to ensure support of restoration efforts.

During the Milwaukee event, introductory remarks on the restoration and protection of Lake Michigan were provided by John Janssen, senior scientist at the University of Wisconsin-Milwaukee Great Lakes WATER Institute. Janssen began by pointing out that research on the overall Great Lakes ecosystem has lagged in the past few decades. Using the parable of the blind men who describe an elephant based on feeling different parts of it, he said the governors' nine priorities are like the parts of an elephant, the whole of which is the entire ecosystem. Unless we integrate these nine priorities into a single, whole-ecosystem plan, Janssen said, we will be like the blind men who don't realize that they are describing different parts of the same elephant.

Janssen then presented a series of images illustrating several recent Great Lakes issues, including cladophora blooms and zebra mussel infestations, and several examples of the complexity of the Great Lakes ecosystem derived from his own research. He reiterated Andren's comment on the impossibility of ever completely restoring the basin to its prior state, giving examples of some actions that would be necessary for "restoration" of the Great Lakes ecosystem to its original state—such as eradicating the lakes' populations of popular and economically valuable exotic species like Pacific salmon, steelhead trout, brown trout and smelt.

## **III. Breakout Group Discussions**

The group breakout sessions saw productive discussion on a wide range of topics. The major discussion points, along with suggestions and recommendations that emerged from each of the three sessions, were captured by a recorder. This section contains a summary of the group discussions organized by topic. The following section summarizes the collective outcome of breakout groups' attempts to rank the priorities from the Council of Great Lakes Governors' list. The following sections summarize the comments received on each of the governors' priorities, plus comments received on additional topics.

## A. Ranking of Priorities

The results of two focus group-style workshops involving over 100 Wisconsin citizens indicates that—while all of the nine Great Lakes restoration and protection priorities developed by the Council of Great Lakes Governors are important—the three most critical priorities for Wisconsin waters of Green Bay and Lake Michigan, and the specific actions needed to address them, are:

# **1.** Ensure the sustainable use of water resources while confirming state authority over the use and diversions of Great Lakes waters:

- Establish sovereignty regarding Great Lakes water
- Pass laws to require water conservation
- Guarantee groundwater replenishment within the Great Lakes watershed
- Establish specific goals or objectives for reductions in storm water runoff
- Ensure return of water to basin
- Educate the public on significance of water cycle, recharge areas, aquifers, watershed, groundwater

## 2. Control water, land and air pollution from diffuse sources:

- Establish environmental regulations that can be implemented and enforced
- Adopt a watershed approach and stop nonpoint-source pollution and wetland loss
- Promote groundwater replenishment
- Fund long-term monitoring to ensure that problems are actually being solved (accountability)
- Support education
- Focus on land use as a way to improve water quality in the Great Lakes

- **3.** (*tie*) Enhance fish and wildlife by restoring and protecting habitats and coastal wetlands:
  - Apply Coastal Zone Management more broadly within the watershed (not just on Great Lakes coast)
  - Identify important conservation areas for protection
  - Locate and protect groundwater recharge areas for Great Lakes
- 3. Stop the introduction and spread of non-native aquatic invasive species:
  - Strengthen local and federal invasive species laws
  - Regulate ballast waters

In addition—noting the need for better K-12, university and public education on all Great Lakes issues—citizens at both workshops suggested that it be added as a tenth protection and restoration priority, or that the need for greater public and formal education made explicit in each of the council's nine priority areas (see Appendices D and E).

Feedback received during a two-week public comment period tended to confirm the priority selections made by workshop participants (Appendices F and G). The respondents generally emphasized the same concerns about sustainable use of Great Lakes water and diversions, pollution and water quality, and non-native invasive species issues.

The Minnesota-Wisconsin workshop held in Duluth indicated that, while invasive species and pollution from diffuse sources were important, the two most important priorities for the Wisconsin and Minnesota waters of Lake Superior are:

## 1. Enhance fish and wildlife by restoring and protecting habitats and coastal wetlands.

- Identify important aquatic and coastal watershed habitat in need of protection and/or restoration, including migratory bird habitat
- Improve planning and enforcement of local land-use policies with a focus on long-term watershed/ecosystem protection
- Coordination of programs among jurisdictions is essential to success
- Education about habitat protection and restoration issues is the number one priority

# 2. Adopt sustainable use practices that protect environmental resources and may enhance the recreational and commercial value of our Great Lakes.

- Define "sustainable use" and provide for a comprehensive growth management strategy that protects the Lake Superior basin
- Provide incentives for best management practices to address watershed and coastal development issues at the local level
- Economic valuations must include ecological considerations and value sustainability

Nearly every breakout group at the Lake Superior workshop likewise stressed that the need for education and outreach on these issues should be stated explicitly the governors' priorities (Appendix H).

In Green Bay, the Council of Great Lakes Governors priority selected as most important based on rankings by participants was "*Controlling pollution from diffuse sources into water, land and air,*" while "*Ensuring sustainable use of Great Lakes water and confirming state authority over water use and diversions*" was a close second. In Milwaukee, those priorities were also seen as the two most important, though reversed in ranking (see Appendix D).

The priority ranked third most important at the Green Bay workshop was "Enhancing fish and wildlife by restoring and protecting habitat and wetlands", with "Reducing the introduction of persistent bioaccumulative toxic chemicals" a close fourth. In Milwaukee, participants split on whether the third top priority should be "Stopping the introduction and spread of non-native aquatic invasive species", or education about all nine priority issues. Two groups in Green Bay also nominated education as the third or fourth top priority.

Several of these groups offered a number of concerns related to Lake Michigan restoration and protection (see Appendix D). Concerns expressed by groups at both workshops include the need for better regional coordination and regional management of the Great Lakes independent of politics, a related need to agree on a set of common regional goals and priorities for their restoration and protection, and adoption of a whole-ecosystem approach to managing Great Lakes resources.

These needs and concerns are reflected in the specific actions and performance measures for addressing these priorities that were suggested at the workshops. Additional comments were provided by nearly two dozen individuals via comment sheets, email and letters, (Appendix F) as well as a feedback form on the UW Sea Grant website (Appendix G). All comments received are included, unedited and without attribution.

## **B.** Comments on Each Priority

# *Priority* #1: Ensure the sustainable use of our water resources while confirming that the States retain authority over water use and diversions of Great Lakes waters

The workshops saw a substantial amount of discussion concerning water use, withdrawal and diversion. Participants expressed strong support for the development of enforceable regulations that would provide Great Lakes states the ability to prevent any diversion of water outside of the basin. An underlying concern was that, under current authorities, the interest of other states, provinces or federal governments may be able to override the authority of the Great Lakes states and provinces.

Some felt that water conservation and decreased development in areas with water shortages were better solutions than diversions of Great Lakes water. Others suggested banning any large

diversions or withdrawals of Great Lakes water unless the return of the water can be ensured and requiring that returned waters must be of similar quality to withdrawn waters. Several participants voiced support for the approval and implementation of the Great Lakes Charter Annex 2001, which they felt would make major strides in this area. Some suggested a formal binational treaty on Great Lakes water quantity.

Participants also expressed considerable support for improved water conservation programs within the basin. Several pointed out the interconnectedness of the region's ground and surface waters and stressed the need to conserve both. Suggested water conservation programs included public outreach efforts to promote efficient water use in such areas as lawn watering, car washing and household use. Innovative water conservation practices, such as using of rain barrels and xeriscaping, were also discussed. Water pricing structures were among the other potential means of promoting conservation. Both market incentives and enforceable regulations were suggested for ensuring water conservation. General educational programs about the water cycle to enhance public understanding of these issues were recommended by some participants. Education and the involvement of public officials were also mentioned.

Better control of storm water, such as the preservation and creation of permeable surface and groundwater recharge areas, was also recommended. To enable this, participants recommended implementing water utility fees and taxes, as well as increased research to map groundwater recharge areas. Regulations on new development, requiring better storm water management planning, were also suggested.

It was pointed out that, for local authorities to make a legitimate claim to authority over Great Lakes water resources, they need to improve their stewardship of these resources with regard to improving water quality and conserving water supplies. The importance of good water resource stewardship for preserving ecosystem health, as well as fulfilling human needs, was emphasized. Further examination of the impacts of water level fluctuations of coastal ecosystems and communities was recommended, as were potential actions to improve control of water levels.

# **Priority #2:** Promote programs to protect human health against adverse effects of pollution in the Great Lakes ecosystem

Participants at both workshops recognized that the health of the Great Lakes and the health of the people living within the Great Lakes basin are closely intertwined. It was noted that achieving this priority was highly dependent on achieving the other priorities, such as those dealing with pollution prevention and reducing toxic substance releases, and engaging the public in programs to improve ecosystem and public health alike. Two major topics of concern with regard to human health were bacterial contamination at beaches and toxic chemical contaminants, particularly in fish.

Several participants cited the need to prevent bacterial contamination of bathing beaches. In addition to threatening the health of beach-goers, contaminated beaches and beach closures deter people from visiting the lakes, which in turn reduces the lakes' public visibility and hampers public support for their restoration. One recommended goal was elimination of the need for

beach closures entirely. Direct sewage discharges to Lake Michigan were identified as a major cause of beach closings, and funding of infrastructure improvements to prevent this was recommended, including complete separation of sanitary and storm sewers.

Protecting human health from toxic chemicals was a prominent concern, with an emphasis on exposure through fish consumption. Both preventing contamination of fish and improving fish consumption advisories were identified needs for protecting human health. Improved fish monitoring was recommended to improve the quality of fish advisories. Improved public outreach programs and public access to fish advisory information were also recommended. One suggestion was to issue fish consumption advisory information with fishing licenses. Others felt better educational programs are needed to inform the public about risks and benefits from consuming fish and how these vary based on types of fish consumed. Low-income populations were mentioned as a particularly important audience for such outreach.

Preventing toxic contamination and remediating contaminated sites were also discussed as important components of protecting public health. These were also discussed in other breakout sessions (see below).

## Priority #3: Control pollution from diffuse sources into water, land and air

Pollution control was a prominent concern among participants at both workshops. Control of sewage system discharges and nonpoint-source discharges were common topics, along with improving sewerage infrastructure to eliminate overflows. These discussions emphasized taking a watershed-based approach to managing water quality in Lake Michigan and its tributaries, which will require collaborative solutions among the many neighboring state, municipal and county governments within a watershed. Implementing Total Maximum Daily Loads for impaired waterways was cited as another important step toward controlling pollution. Monitoring of water quality is needed throughout the region to track progress.

There were many comments about preventing runoff from residential and agricultural properties, including reducing fertilizer and pesticide use on lawns and increasing controls on agricultural manure. Implementing buffer strips around all waterways was deemed an important means of reducing runoff and improving water quality. Addressing land use planning throughout the Lake Michigan watershed and recognizing its relationship to water quality was recommended. Preventing sedimentation was emphasized as an important means of reducing dredging demands. Creation of new programs to prevent and respond to spills was also supported.

Implementing each of these recommendations will require working with public officials to achieve funding and implement plans. The enforcement of and accountability for current and possibly new regulations was a concern. Other topics of discussion included concerns about the use of road salt, bacterial contamination from wildlife, and air emissions from automobiles and energy production.

# *Priority #4*: Continue to reduce the introduction of persistent bioaccumulative toxics into the Great Lakes ecosystem

Persistent toxic substances was a topic receiving considerable attention at both workshops. Several specific chemicals of concern were discussed, including mercury, PCBs, PBDEs and other flame retardants, and pharmaceuticals. For many of these, especially mercury, the atmosphere was recognized as the dominant source to the lakes. Many participants suggested additional controls on mercury air emissions, particularly for coal-burning power plants. One suggestion was to impose a small electricity tax to fund such controls.

Besides preventing continued contamination, preventing resuspension of previously deposited toxic substances was also a concern. Preventing the introduction of new persistent toxic substances to the system is a critical need. Public education on the sources and effects of toxic substances was advised to encourage citizen participation in pollution prevention initiatives. Some participants expressed concern that the "reduce introduction" wording of this priority might be interpreted as less stringent than the "virtual elimination" goals of the Great Lakes Water Quality Agreement.

# **Priority #5: Stop the introduction and spread of non-native aquatic invasive species**

Almost all workshop participants recognized the importance of preventing the spread and further introductions of aquatic invasive species. Among the specific organisms of concern were Asian carp, the spiny waterflea, zebra mussels and sea lamprey, as well as cladophora and other aquatic nuisance plants. Ballast water discharge was the most commonly mentioned route of entry, and implementing technologies and regulations to prevent introductions through this route was strongly advocated. At least one participant suggested banning ocean-going ships from the Great Lakes.

Some additional routes of entry mentioned included the aquaria trade of live species and the Chicago Sanitary and Ship Canal. Banning sales of potential invasive species and fully funding barriers in the Chicago canal were among the recommended solutions to these issues, along with faster identification of newly introduced species and response actions. Some participants advocated passage of a tough National Aquatic Invasive Species Act.

For established exotic species, adaptive management was suggested. Salmon were cited as an example of an exotic species that is considered useful. It was suggested that beneficial uses might also be found for some of the other exotic species. Assessing the long-term costs of new invasions was suggested as a method for demonstrating the urgency of preventing new invasions. Obstruction of water intake pipes by zebra mussels was mentioned as an example of a costly long-term impact. Measuring progress toward realistic targets was mentioned as one difficulty in addressing the issue of aquatic invasives. Possible measures of success include no new introductions, and no major aquatic population shifts or ecosystem changes.

# *Priority #6*: Enhance fish and wildlife by restoring and protecting habitats and coastal wetlands

Habitat protection and restoration initiatives were strongly advocated by participants at both workshops. Wetlands and coastal habitats were specifically mentioned as needing protection and restoration. The important role wetlands play within the Great Lakes ecosystem, such as filtering water, was discussed. Preservation of undeveloped shoreline areas was cited by some as an urgent need.

It was also suggested that upland habitat initiatives in Great Lakes need to be included in restoration plans, as these have important impacts on the region's ecosystem. Comprehensive habitat planning was advocated to ensure adequate and efficient preservation. Although greater research into Great Lakes ecosystems was supported, it was emphasized that habitat preservation actions are urgently needed now.

Many comments were made about the management of commercial and recreational fisheries within the region. The ability to accurately detect and evaluate fluctuations in fish populations is key to making proper management decisions. Consistency in fishery policies across the basin was suggested. Several participants noted that better integration of fisheries management efforts with ecosystem management efforts is needed.

## **Priority #7: Restore to environmental health the Areas of Concern (AOC) identified** by the International Joint Commission as needing remediation

Restoring the portions of the basin identified as Areas of Concern (AOC) was the subject of many participant comments. Remedial Action Plans have been developed for many AOCs, including Green Bay, and it was recommended that local communities work with local, regional and national leadership to implement them. It was noted that additional funding is needed to put these plans into action and that receiving this funding would help reinvigorate Remedial Action Plan committees. It was suggested that the local communities for each AOC be engaged to develop implementation priorities for the actions listed in these Plans. Additional outreach and education to citizens is needed to emphasize the impacts that AOC impairments have on health and the economy.

# *Priority #8*: Standardize and enhance the methods by which information is collected, recorded and shared within the region

During the workshops, considerable attention was given to the region's monitoring and information management systems. It was recognized that restoration activities within the basin would require significant monitoring and data management components to aid in project prioritization, implementation and tracking of progress.

There was broad agreement among participants that regional data and information management systems need better standardization to allow interoperability. The lack of data-sharing across

jurisdictional boundaries was cited as an important problem, and the creation and maintenance of data clearinghouses for the region were recommended, along with programs to increase data sharing among agencies, jurisdictions and institutions. One suggestion was to formally recognize or give awards to projects exemplifying good regional information management.

Among the specific types of crucial data mentioned were fish stocking records, pollutant emissions and monitoring, beach monitoring, conservation areas, water quality monitoring, and native and non-native species distributions. It was recommended that data systems that incorporate monitoring input by citizen groups be developed, and that consolidated, understandable information be provided back to the public. Some were concerned that, even when data is collected and distributed, it may not be used adequately or appropriately.

# *Priority #9*: Adopt sustainable use practices that protect environmental resources and may enhance the recreational and commercial value of our Great Lakes

There were many comments from participants concerning the environmental and economic sustainability of the region and its natural resources. Among the most important Great Lakes economic activities mentioned were recreation, tourism, shipping and fishing. Participants pointed to a need to restore recreational opportunities on the lakes, expressing concern that polluted beaches and restricted access are increasingly limiting recreational opportunities. Increased production and use of alternative energy was advocated, including wind, solar, hydro and biomass energies. The concept of "sustainability" was generally well received because it connoted a future vision rather than a focus on the past. To achieve sustainability, a process was that examines what our targets are, where we are now and how to move forward was recommended. Social values and quality of life issues also need to be incorporated into basinwide restoration and protection activities.

## **C. Additional Topics**

A variety of additional issues were raised at the two workshops. Education, public involvement, quick action and efficient use of resources were identified as necessary characteristics for any Great Lakes restoration and protection plan.

Many workshop participants felt the importance of education and public involvement needs to be made explicit in the governors' list of priorities. In particular, the need for educational programs on Great Lakes issues and aquatic science was a prominent theme at both workshops. As mentioned previously, participants at the Lake Superior workshop in Duluth likewise cited education as a high priority. Better educational programs are seen as essential for stimulating and training a new generation of Great Lakes resource managers and scientists. Education at the grade school level was cited as particularly important. Adequately funding agencies to carry out public outreach and education programs was also mentioned. Getting the media more interested in Great Lakes issues was cited as key to generating greater public involvement. Participants also called for continued involvement of the public in the priority setting and planning process.

It was noted by many participants that there is a considerable amount of interrelatedness and synergy among the items on the Governors' list. Increased funding of research programs in the region was supported. Connections between scientists and policy makers need to be improved. Efforts should be made to ensure that laws concerning the Great Lakes are consistent across the international border, as well as state and local borders. To that end, better interaction among lawmakers within the region on Great Lakes topics was suggested.

Several participants noted the need for leadership in restoration planning and implementation. Accountability for all existing and new programs needs to be enforced. In addition to increasing accountability for agencies and politicians, citizens also need to accept greater responsibility for Great Lakes stewardship. Full funding and implementation of current programs was suggested as one way to address a considerable number of current needs; however, there was concern that the multitude of Great Lakes agencies may result in redundancy, inefficiency and ineffectiveness in some aspects of Great Lakes management. Regulatory authority concerning many Great Lakes issues needs clarification. Some participants suggested that a more defined leadership structure needs to be created among Great Lakes agencies, and others called for solidarity and consistency among Great Lakes organizations in their requests for national support and federal assistance.

Remaining apolitical throughout the restoration process is seen as crucial to effectively setting and achieving restoration goals. It was also suggested that Great Lakes organizations ensure they are adequately representing the regional interests of Canada as well as the United States.

Despite the complexity of planning restoration for the entire Great Lakes ecosystem, workshop participants nonetheless recommended that restoration plans start with a view of the Great Lakes basin as a single, living system and that restoration strategies be formed in the context of the whole ecosystem, as opposed to addressing various issues separately. Participants stressed the importance of comprehensive planning at the regional level. This regional approach should also incorporate and support local-scale initiatives and organizations as part of a tiered structure with multiple levels—a comprehensive structure that also promotes and builds on citizen action.

Three organizations submitted comments concerning the need to protect or increase the rights of shoreline property owners (see Appendix F). Others pointed to the need to substantially redesign many of the ports in the system and to evaluate the vulnerability of the lakes to terrorist attack. Others offered comments on such issues as dredging, long-term trends in Great Lakes water levels, boater safety education, land use impacts, shoreline access, determination of high-water marks and urban sprawl. Finally, many of the comments made at and after these workshops urged that the protection and restoration process be initiated quickly.

## **IV. Summary and Conclusions**

Over the course of these two focus group-style workshops, a considerable amount of input was received from two relatively small yet highly representative groups of stakeholders regarding Great Lakes restoration needs, particularly for Wisconsin waters of Lake Michigan (see Appendix A). Workshop participants provided a wide spectrum of viewpoints on the relative importance of each of the governors' Great Lakes restoration priorities for Green Bay and Lake Michigan, pointed out a few priorities that they felt should be added to or made explicit in the governors' list, and shared many valuable opinions on how a Great Lakes restoration initiative might be structured and implemented.

Nonetheless, the majority of the recommended actions and objectives from these two workshops complement each other. Despite the diversity of viewpoints from participants in two very different regions of the state, they all tended to share similar opinions on the most important priorities for Great Lakes restoration. In sum, this spectrum of viewpoints blends into a unified vision of a restored Great Lakes that provides a valuable basis for developing a comprehensive regional restoration strategy in concert with the other states of the region. Moreover, the action items identified at the Wisconsin workshops correspond closely with those expressed by the Great Lakes governors in their May 14, 2004, letter to federal appropriations leaders (Appendix C). The comments received regarding the governors' priorities were of a constructive nature, and the feedback from participants at both workshops indicates a large degree of congruence between the Great Lakes issues confronting Wisconsin and those facing the region as a whole, as suggested in the governors' letter.

The outcomes of these workshops add depth and detail to what has emerged as a shared list of restoration priorities for constituencies throughout the Great Lakes basin. The input received from the Wisconsin community will help define the desired outcomes and actions necessary to achieve each of the stated priorities. This input, when combined with that from other areas of the basin, will form a detailed and comprehensive record of what is needed at the local, regional and national levels to bring Great Lakes restoration to fruition. These workshop outcomes provide additional value by defining problem areas and required actions that are unique to Wisconsin's portion of the basin. This process of defining priority problems and required actions is the first step in a lengthy but necessary process of restoring the Great Lakes to their full ecological, social and economic value.

The organizers are very satisfied with the focused, high-quality feedback they received and are grateful to the 100-plus individuals who took the time to participate in these half-day workshops in Green Bay and Milwaukee. They are pleased to have contributed to this effort to build consensus and unity among the eight Great Lakes states for advocating long-term, large-scale federal funding to restore and protect the Great Lakes. The citizens of Wisconsin and the other Great Lakes states—indeed, all Americans—share a special responsibility to preserve and protect this treasure for future generations. The Great Lakes restoration and protection workshop series—an unprecedented partnership between the Great Lakes Commission, Great Lakes Sea Grant Network, and the governor's office and relevant agencies in each state—demonstrates how seriously we take that responsibility.

## **Appendix A: Registered Participants**

## Green Bay Workshop (N = 52)

Anders Andren, UW Sea Grant, Madison Kendra Axness, UW-Extension, Peshtigo Kate Barrett, Wis. Dept. of Natural Resources, Madison Jim Baumann, Wis. Dept. of Natural Resources, Madison Richard Becker, Conservation Congress-Great Lakes. Two Rivers Colette Charbonneau, U.S. Fish & Widlife Service, New Franken **H. J. Day**, Green Bay Michael Donahue, Great Lakes Commission, Ann Arbor, Mich. Dan Egan, Milwaukee Journal Sentinel Ted Eggebreaten, Baileys Harbor Diane Figiel, Dept. of Natural Resources, Madison Michael Finney, Oneida Tribe, Oneida Mike Friis, Wis. Coastal Management Program, Madison Mary Gansberg, Wis. Dept, of Natural Resources, Green Bay Jayson Giese Joshua Giese, Great Lake Sport Fishing Green Bay Area, Green Bay Mike Grimm, The Nature Conservancy, Sturgeon Bay Dean Haen, Port of Green Bay, Green Bay Bill Hafs, Brown County Land Conservation, Green Bav G. Jag Halgten, Algoma Bud Harris, UW-Green Bay Vicky Harris, UW Sea Grant, Green Bay Russ Hermsen, Suamico Harbor Commission, Suamico Scott Hoberman. Manitowoc Mark Holey, U.S. Fish & Widlife Service, New Franken John Huff, Wis. Dept. of Natural Resources, Peshtigo Jim Hurley, UW Sea Grant, Madison John Karl, UW Sea Grant, Madison Rebecca Katus, Clean Water Action Council, Green Bav Mike Kitt, Wis. Dept. of Natural Resources, Peshtigo Steve Laszewski, Foth & Van Dyke and Associates, Inc., Green Bay Chuck Ledin, Wis. Dept. of Natural Resources, Madison Wayne Maki, Oconto

Mark Maricque, Green Bay Mathew Marty, Archibald Lake Association, Madison Roger Miller, Miller Engineers & Scientists, Sheboygan Kellev O'Connor, Wis. Dept. of Natural Resources, Green Bay Robert Paulson, Minergy, Neenah Tom Peters, Suamico Pete Petrouske, DePere Sportsman Club, Green Bay Angela Pierce, Bay Lake Regional Planning Commission, Green Bay Derek Scheer, Clean Wisconsin, Madison Kathy Schmitt, UW Sea Grant, Madison Janet Smith, U.S. Fish & Wildlife Service, New Franken Rebekah Stauffer, Milwaukee Community Service Corps, Milwaukee Jim TeSelle, International Great Lakes Coalition-Wis. Chapter, Grafton Ron Vander Loop, Brown County Conservation, Green Bay Jerry Viste, Door County Environmental Council, Sturgeon Bay Tom Ward, Manitowoc County Soil & Water Dept., Manitowoc Robert Wenger, UW-Green Bay **Bill Willis**, Great Lakes Sport Fishing Green Bay Area. Green Bay Stephen Wittman, UW Sea Grant, Madison

## **Facilitators**

Kendra Axness, UW-Extension, Peshtigo
Kate Barrett, Wis. Dept. of Natural Resources
Jim Baumann, Wis. Dept. of Natural Resources,
Green Bay
Diane Figiel, Wis. Dept. of Natural Resources, Green
Bay
Mike Friis, Wis. Coastal Management Program,
Madison
Jim Hurley, UW Sea Grant, Madison
John Karl, UW Sea Grant, Madison
Kelley O'Connor, Wis. Dept. of Natural Resources,
Green Bay
Kathy Schmitt, UW Sea Grant, Madison
Stephen Wittman, UW Sea Grant, Madison

## Milwaukee Workshop (N = 54)

Anders Andren. UW Sea Grant, Madison Kate Barrett, Wis. Dept. of Natural Resources, Madison Fran Bihowchi, West Allis Gregory Bird, Bayview Historical Society, Milwaukee Marsha Burzynski, Wis. Dept. of Natural Resources Vince Bushell, River Revitalization Foundation, Milwaukee Michael Donahue, Great Lakes Commission, Ann Arbor, Mich. Jen Erickson, UW-Extension, West Allis Daniel Feinstein, U.S. Geological Survey, Milwaukee David Fowler, Milwaukee Metropolian Sewerage District, Milwaukee Michael Frome, Port Washington Emily Green, Sierra Club, Madison Sharan Guyan, Wis. Dept. of Natural Resources, Milwaukee David Hart. UW Sea Grant. Madison Anoy Holschbach, Ozaukee County Planning Resources Land Mgmt., Port Washington Bill Horns, Wis. Dept. of Natural Resources, Madison Mark Hosenberg, Wisconsin Federation of Great Lakes Sport Fishing Clubs, Kenosha Jim Hurley, UW Sea Grant, Madison John Janssen, UW-Milwaukee Peter Johnson. Council of Great Lakes Govenors. Chicago John Karl, UW Sea Grant, Madison Peg Kohring, The Conservation Fund, Sawyer, Mich. Dave Kurczewski. Lake Shore Fishermans Club. Milwaukee Chuck Ledin, Wis. Dept. of Natural Resources, Madison Jim Lubner, UW Sea Grant, Milwaukee Roger Miller, Miller Engineers & Scientists, Sheboygan Mark Mittag, CH2M Hill, Whitefish Bay Ron Ondrevka, Great Lakes WATER Institute, Whitefish Bay Vic Pappas, Wis. Dept. of Natural Resources, Plymouth Shaili Pfeiffer, Wis. Dept. of Natural Resources, Madison Jeffrey Potter, Biodiversity Project, Madison

Jen Punzel, EAGLE Environ, Assoc. for Great Lakes Educators, Duluth, Minn. **Tina Rees**, Triad Engineering, Inc., Milwaukee Kyle Rogers, U.S. Environmental Protection Agency Cathy Rose, Lake Michigan Federation, Milwaukee Helen Sarakinos, River Alliance of Wisconsin, Madison Merrie Schamberger, USDA Natural Resources Conservation Service, Port Washington Donna Schieman, Preserve Our Parks, Milwaukee Nick Schmal, USDA Forest Service, Milwaukee Kathy Schmitt, UW Sea Grant, Madison Jack Smies, Great Lakes Coalition, Oostburg Jim Smith, Lake Shore Fishermans Club, Milwaukee Rebekah Stauffer, Milwaukee Community Service Corps, Milwaukee Stephanie Sward, City of Kenosha Russ Tooley, Centerville Cares, Cleveland Angelo Trentadue, Fishing Bug Charter, Racine Alberto Vargas, Wis. Coastal Management Program, Madison Rhonda Volz, Wis. Dept. of Natural Resources, Plymouth Sara Wilson, Mayes Wilson Associates, Milwaukee Michael Witkiewicz, Salmon Unlimited, Racine Stephen Wittman, UW Sea Grant, Madison **Dick Yahr**. Lincoln Park Center. Milwaukee

## **Facilitators**

Kate Barrett, Wis. Dept. of Natural Resources, Madison
Marsha Burzynski, Wis. Dept. of Natural Resources,
Jenny Erickson, UW Extension, West Allis
Jim Hurley, UW Sea Grant, Madison
John Karl, UW Sea Grant, Madison
Vic Pappas, Wis. Dept. of Natural Resources, Plymouth
Shaili Pfeiffer, Wis. Dept. of Natural Resources, Madison
Kathy Schmitt, UW Sea Grant, Madison
Rhonda Volz, Wis. Dept. of Natural Resources, Plymouth
Stephen Wittman, UW Sea Grant, Madison

# Appendix B: Workshop Program and Breakout Instructions

Noon – 12:30	Registration of Participants, Distribution of Agenda & Workshop Materials
12:25 - 12:30	Call to Order, Introductions
12:30–12:45	Welcome, Goals for the Day – UW Sea Grant Director Anders W. Andren What does 'restoration' mean?
12:45 – 1:00	<b>Regional Overview</b> – Great Lakes Commission CEO Michael Donahue The role of the Great Lakes Commission and charge to workshop participants
1:00 – 1:15	<b>Presentation of Council of Great Lakes Governors' Priorities</b> GREEN BAY – WDNR Great Lakes Office Director Charles Ledin MILWAUKEE – CGLG Senior Program Manager Peter Johnson
1:15 – 1:40	Lake Michigan Restoration and Protection Issues GREEN BAY – UW-Green Bay Professor Emeritus H.J. "Bud" Harris MILWAUKEE – UW-Milwaukee Senior Scientist John Janssen
1:40 – 1:45	Overview, Format of Breakout Sessions – Lead Facilitator Stephen Wittman
1:45 – 2:30	Breakout Session 1 Ranking CGLG priorities
2:30 – 2:45	Reports of Priority Rankings by Breakout Groups Reports by a citizen member of each group
2:45 - 3:00	Refreshment Break
3:00 – 3:30	Breakout Session 2, First Round Action items, key participants, some measures of success for priority A
3:30 - 4:00	Breakout Session 2, Second Round Action items, key participants, some measures of success for priority B
4:00 - 4:10	<b>Refreshment Break</b> Facilitators compile/prepare reports from both rounds of Breakout 2
4:10 – 5:00	<b>Breakout Groups Reports</b> (Group Facilitators), <b>Next Steps</b> (Andren) Comments accepted until Aug. 31, send to UW Sea Grant Report sent to WDNR, WCMP, Wis. Governor's Office for review Report submitted to GLC for incorporation into regional report Commission shares regional report with leaders & stakeholders

## Instructions Provided to Breakout Groups in Workshop Handout

## **Breakout Session 1**

*Goal for the Session*: Each table will agree upon their top three priorities from the Council of Great Lakes Governors' list of priorities.

*Discussion*: The groups will discuss the following:

- 1. What are the major themes or needs for Lake Michigan and where should they be placed within these nine priority areas?
- 2. Are there other conservation and restoration priorities for Lake Michigan's basin that you wish to share with the Council of Great Lakes Governors?
- 3. What are the top three priorities from the Governors' list?

Product from Each Group: Each group will report back their top three priorities.

**NOTE:** You are welcome to submit your discussion notes and/or additional comments for inclusion in the summary report; please use the space below on this sheet and/or the sheet listing the Council of Great Lakes Governors' priorities.

## **Breakout Session 2**

**Goals for the Session:** Identify Lake Michigan-specific action items and important participants for addressing each of the Council of Great Lakes Governors' priorities.

**Note:** This session is divided into two rounds. Everyone will get the opportunity to participate in discussions of two Council of Great Lakes Governors priorities, one during each round. Each table will have a placard on it indicating which of the nine priorities from the Governors' list will be discussed at that table. You are welcome to submit additional comments and ideas for any or all of the nine priorities; please use the space below on this sheet and/or the sheet listing each of the Council of Great Lakes Governors' priorities.

*Discussion*: The groups will discuss the following for each priority:

- 1. What are some action items specific to Lake Michigan for addressing this priority?
- 2. What interest groups should be involved in implementing these action items? (Includes groups such as local government, business and industry, education, resource management agencies, etc.)
- 3. What are some of the measures of progress and success in satisfying this priority?

*Product from Each Group*: The facilitator at each table will consolidate and summarize the action items identified in Rounds 1 and 2 for each priority.

## Appendix C: Council of Great Lakes Governors Priorities Letter to Federal Appropriations Leaders



BOB TAFT CHAIRMAN Governor of Ohio

ROD BLAGOJEVICH Governor of Illinois

JIM DOYLE Governor of Wisconsin

JENNIFER M. GRANHOLM Governor of Michigan

JOSEPH E. KERNAN Governor of Indiana

GEORGE E. PATAKI Governor of New York

TIM PAWLENTY Governor of Minnesota

ED RENDELL Governor of Pennsylvania

DAVID NAFTZGER Executive Director

35 East Wacker Drive Suite 1850 Chicago, IL 60601

*Voice:* 312-407-0177 *Fax:* 312-407-0038 *Web:* <u>www.cglg.org</u> *e-mail:* cglg@cglg.org May 14, 2004

The Honorable Ted Stevens Chairman U.S. Senate Committee on Appropriations The Capitol, S-128 Washington, D.C. 20510

The Honorable Robert C. Byrd Ranking Member U.S. Senate Committee on Appropriations The Capitol, S-125A Washington, D.C. 20510 The Honorable C.W. Bill Young Chairman U.S. House Committee on Appropriations The Capitol, H-218 Washington, D.C. 20515

The Honorable David R. Obey Ranking Member U.S. House Committee on Appropriations 1016 Longworth House Office Building Washington, D.C. 20515

On October 1, 2003, we the Great Lakes Governors outlined nine Great Lakes restoration and protection priorities to guide Great Lakes restoration and protection efforts. To meet these priorities, we believe that it is important for the U.S. Congress to provide immediate support for important activities in addition to large scale, long-term funding. We continue to work with the region's Mayors toward this end.

As the Governors of our nation's Great Lakes States, we continue to support large scale, long-term funding programs to be implemented by the States. These programs will be essential to the restoration and protection of the Great Lakes. In addition to our continued support for the important principle of large scale, State-implemented restoration and protection funding, we urge the following appropriations in fiscal year 2005 to advance each of the priorities for Great Lakes restoration and protection that were outlined in our October 1 letter.

## • Ensure the sustainable use of our water resources while confirming that the States retain authority over water use and diversions of Great Lakes waters.

To successfully implement the Great Lakes Charter Annex of 2001, the collection and application of scientific information regarding surface and ground water must be improved in the Great Lakes Basin.

We ask that an initial \$5 million be authorized and appropriated for this work by the U.S. Geological Survey, National Oceanic and Atmospheric Administration, and the U.S. Army Corps of Engineers. Producing three- dimensional geologic models of glacial materials by the Central Great Lakes Geologic Mapping Coalition is included in this request.

# • Promote programs to protect human health against adverse effects of pollution in the Great Lakes ecosystem.

Combined sewer overflows are a major source of pollution concentrated mostly in the older cities of the Great Lakes Region and the northeastern U.S. The Wet Weather Water Quality Act of 2000 authorized \$1.4 billion nationally to begin to address this issue.

We ask that appropriations be prioritized to address combined sewer overflows in the Great Lakes region.

#### • Control pollution from diffuse sources into water, land and air.

Clean Water Act Section 319 program funding provides grants for nonpoint source controls. In fiscal year 2004, nationwide funding resulted in approximately \$60 million for the Great Lakes States. Continued funding is essential.

We would ask that \$60 million again be authorized and appropriated for the Great Lakes States.

• Continue to reduce the introduction of persistent bioaccumulative toxics (PBT) into the Great Lakes ecosystem. The Bi-national Toxics Reduction Strategy has as its goal the minimization of continued PBT introductions.

Toward this end, we ask that funds be appropriated for a pollutant minimization incentive program for industries and municipalities in the amount of \$1.6 million for the region.

#### • Stop the introduction and spread of non-native aquatic invasive species.

The National Aquatic Invasive Species Act (NAISA) provides a tremendous opportunity to increase the national focus on prevention and control of harmful species that affect the environment and economy of our country. In the Great Lakes region, we have been stricken by sea lampreys, zebra mussels, round gobies and many other invading species. The impacts are real, affecting a major share of our nation's industrial and agricultural output and threatening the well-being of 25 million Americans who depend directly on the Great Lakes for water, recreation and food. Six of the Great Lakes states have developed and are currently implementing state management plans to control the economic and ecological impacts of invasive species.

We therefore ask that you reauthorize the NAISA by passing HR 1080 and S525 as well as appropriating funds to implement this Act. We also ask that an additional \$4.2 million be authorized and appropriated for sea lamprey controls in the Great Lakes and that the current U.S Fish and Wildlife Service's appropriation for implementation of state management plans be increased by \$1.8 million. Finally, we ask that you support the request of the House and Senate Great Lakes Task Forces for \$8 million to make permanent the existing barrier in the Chicago Sanitary & Ship Canal, to construct a second barrier, and to operate and maintain both barriers at full federal cost to prevent the spread of the Asian carp and other non-native species.

#### • Enhance fish and wildlife by restoring and protecting habitats and coastal wetlands.

It is crucial to protect sensitive coastal habitats, which are irreplaceable once lost. To that end, \$30 million was appropriated in 2001 as part of the Great Lakes Coastal Restoration Program. That funding attracted an additional \$42 million in State and local matches that was spent largely on habitat protection and restoration.

In addition, the U.S. Fish and Wildlife Service's Upper and Lower Great Lakes field stations provide critical research, monitoring and restoration of Lake Trout and endangered species like the Lake Sturgeon and Piping Plover. The hatcheries are the primary source of Lake Trout eggs and fingerlings stocked in the Great Lakes each year to maintain what has become a world class sportfishery, creating significant economic benefits for small businesses and communities throughout the Great Lakes Basin. It is also imperative that federal and State agencies coordinate marking of hatchery fish in the Great Lakes Basin to evaluate restoration efforts and sustainability of the fishery. We ask that \$5.6 million be appropriated to maintain this valuable asset.

We therefore ask that funding for these programs be reauthorized at a minimum level of \$35.6 million and that funding be appropriated in the same amount.

## • Restore to environmental health the Areas of Concern (AOC) identified by the International Joint Commission as needing remediation.

The Great Lakes Water Quality Agreement directs Canada and the United States, working with State and provincial governments, to develop plans (known as Remedial Action Plans) to restore and protect ecosystem health so that the water is drinkable, beaches are swimmable and fish are safe to eat, among other such beneficial uses. The two nations also agreed that the worst areas, designated as "Areas of Concern" would be given priority attention.

We ask Congress to appropriate previously authorized funds in the amount of \$5.7 million to distribute to the Great Lakes States via program grants for Remedial Action Programs (RAPs) and Lakewide Management Plans (LaMPs); \$15.4 million for other AOC related activities; as well as \$45 million for Legacy Act implementation.

We therefore request that funds in the amount of \$66.1 million be appropriated to address Areas of Concern throughout the Great Lakes.

#### • Standardize and enhance the methods by which information is collected, recorded and shared within the region.

It is essential that indicators of water quality and related environmental factors in the Great Lakes be developed and a network created to monitor those indicators regularly throughout the Great Lakes Basin.

We therefore ask that funds in the amount of \$7 million be authorized in support of these efforts. We further ask that this amount be appropriated to ensure that the best scientific information can be provided to those who manage the waters of the Great Lakes.

• Adopt sustainable use practices that can protect environmental resources and that may enhance the commercial and recreational value of our Great Lakes.

In spite of extensive efforts in all the Great Lakes States and municipalities to improve sewage treatment, beach closings remain a vexing problem. Monitoring and early detection is essential to ensure that our citizens' health is adequately protected. The Beach Act authorizes critical funds to allow the Great Lakes States to improve beach-monitoring and posting programs.

We therefore ask that Congress appropriate \$2 million already authorized under the Beach Act. In addition, we urge you to allow State grant administration costs to be allowable in determining match requirements.

We welcome the opportunity to join you in protecting and restoring the Great Lakes by taking these substantive steps this year. We believe progress toward our shared goals for the Great Lakes is essential to the public health and economic vitality of our nation. We continue to engage the public in our dialogue and look forward to building on the partnership among our region's Governors, Mayors and Members of Congress.

[Signed]

**Rod Blagojevich** *Governor of Illinois* 

Jennifer M. Granholm Governor of Michigan

George E. Pataki Governor of New York

**Edward Rendell** *Governor of Pennsylvania* 

cc: Great Lakes U.S. Congressional Delegation

Joseph E. Kernan Governor of Indiana

**Tim Pawlenty** *Governor of Minnesota* 

**Bob Taft** *Governor of Ohio* 

**Jim Doyle** *Governor of Wisconsin* 

## Appendix D: Breakout Session 1 Rankings of CGLG Priorities and Related Concerns

Combined Results of Breakout Groups at Both Workshops

Scores in parentheses are based on points out of 27 possible\*

- #1. Ensure the sustainable use of our water resources while confirming that the states retain authority over water use and diversions of Great Lakes waters. (18)
- #2. Control pollution from diffuse sources into water, land and air. (14)
- #3. Stop the introduction and spread of non-native aquatic invasive species. (5)Enhance fish and wildlife by restoring and protecting habitats and coastal wetlands. (5)
- #4. Continue to reduce the introduction of persistent bioaccumulative toxics into the Great Lakes ecosystem. (4.5)
- #5. Enhance education about the Great Lakes at all levels. (3.5)
- #6. Promote programs to protect human health against adverse effects of pollution in the Great Lakes ecosystem.(2)
- #7. Adopt sustainable use practices that protect environmental resources and may enhance the recreational and commercial value of our Great Lakes. (1)
- #8. Standardize and enhance the methods by which information is collected, recorded and shared within the region. (0.5.)
- **#9.** Restore to environmental health the Areas of Concern (AOC) identified by the International Joint Commission as needing remediation. (0)

\*Based on top-3 votes from combined votes of a total of 9 breakout groups: #1 priority vote = 3 points; #2 = 2; #3 = 1; #4 (when so voted) = 0.5

## Green Bay Workshop Group Rankings & Related Concerns

### **All Groups Combined Results**

- #1. Controlling pollution from diffuse sources into water, land and air
- #2. Ensuring sustainable use of Great Lakes water and confirming state authority over water use and diversions.
- #3. Enhancing fish and wildlife by restoring and protecting habitat and wetlands.

## Group 1

- #1. Ensure the sustainable use of our water resources while confirming that the States retain authority over water use and diversions of Great Lakes waters.
- #2. Promote programs to protect human health against adverse effects of pollution in the Great lakes ecosystem.

- #3. Control pollution from diffuse sources into water, land and air.
- #4. Continue to reduce the introduction of persistent bioaccumulative toxics into the Great Lakes system.

## Group 2

- #1. Control pollution from diffuse sources into water, land and air.
- #2. Continue to reduce the introduction of persistent bioaccumulative toxics into the Great Lakes ecosystem.
- #3. Enhance fish and wildlife by restoring and protecting habitats and coastal wetlands.
- #4. Standardize and enhance the methods by which information is collected, recorded and shared within the region.

## Group 3

- #1. Ensure the sustainable use of our water resources while confirming that the States retain authority over water use and diversions of Great Lakes waters.
- #2. Continue to reduce the introduction of persistent bioaccumulative toxics into the Great Lakes ecosystem.
- #3. Stop the introduction and spread of non-native aquatic invasive species.

### **Related Concerns**

• Control of invasive species critical to sustainable fishery.

### Group 4

- #1. Ensure the sustainable use of our water resources while confirming that the States retain authority over water use and diversions of Great Lakes waters.
- #2. Enhance fish and wildlife by restoring and protecting habitats and coastal wetlands.
- #3. Education.

### **Related Concerns**

- Where is citizen involvement recognized or promoted (marginalized?)
- Greater accountability: needs to be explicitly stated.
- Priorities do not address leadership requirements.
- Not enough emphasis on citizen/activist group partnerships.
- Political risks often impede results; many politicians are often out of office before results are realized .
- Public is not educated or informed on the issues (communication/educational component is necessary to raise public awareness on issues).
- Need to enforce existing rules.
- Importance of interconnection of all waters.
- Sustainability is very important.
- Water diversions: prevent outside use pressure.
- There isn't much time to address many problems: the time to act is now (much harder to restore habitat than preserve it).

- Great Lakes health is dependent on wetlands.
- Need accountability.

## Group 5

- #1. Control pollution from diffuse sources into water, land and air.
- #2. Stop the introduction and spread of non-native aquatic invasive species.
- #3. Adopt sustainable use practices that protect environmental resources and may enhance the recreational and commercial value of our Great Lakes.

Priority that should be added: Education component in all priorities.

### Related Concerns

- Combined sewer overflow.
- Threat of exotic species: Asian carp, spiny water flea and zebra mussels.
- Sediment management.
- Sustainable recreational uses: sport fishing, boating.
- Need to anticipate effects of increased water transport.
- Need better organization of the management structure within the Great Lakes region.
- Need a standardized fishery policy, as well as standardized data collection.
- Region needs to agree to common goals.
- Public must be educated on Great Lakes issues.
- Loss of wetlands and groundwater recharge are concerns.

## Group 6

- #1. Control pollution from diffuse sources into water, land and air.
- #2. Enhance fish and wildlife by restoring and protecting habitats and coastal wetlands.
- #3. Stop the introduction and spread of non-native aquatic invasive species.

### Related Concerns

- There has been a fragmented approach to solving Great Lakes problems.
- Problems should be addressed locally and regionally, but there also needs to be strong oversight in order to coordinate efforts of all agencies and groups.
- Need to able to address emerging issues, such as exotics, in a preventative way rather than reactive.
- Need a management structure that isn't affected by political struggles.
- Even when we can gather the data, it's often not appropriately utilized.
- Governors need to be sure to combine both an economic and ecosystem vision for Great Lakes: need to avoid only focusing on isolated problems.
- Lakes are reflecting widespread abuse of ecosystem processes.

## Milwaukee Workshop Group Rankings & Related Concerns

### **All Groups Combined Results**

- #1. Ensuring sustainable use of Great Lakes water and confirming state authority over water use and diversions.
- #2. Controlling pollution from diffuse sources into water, land and air.
- #3. (*tie*) Stopping the introduction and spread of non-native aquatic invasive species. Education about all nine priority issues.

### Group 1

- #1. Ensure the sustainable use of our water resources while confirming that the States retain authority over water use and diversions of Great Lakes waters.
- #2. Control pollution from diffuse sources into water, land and air.
- #3. Stop the introduction and spread of non-native aquatic invasive species.

### Group 2

#1. Ensure the sustainable use of our water resources while confirming that the states retain authority over water use and diversions of Great Lakes waters.

Priorities that should be added:

- Education
- Land use planning

#### **Related Concerns**

- Prevent sewage dumping and beach closings.
- Need to address the connection between groundwater and the Great Lakes.
- Support citizen-based water monitoring to better inform public.
- Habitat biodiversity is tied to watersheds and the lakes.
- Lack of funding for research.
- There is too much focus on only popular sport fish species: need to look at the whole ecosystem.
- Public education and involvement is key.
- Introduction of exotics and perception of pollution is turning people away from the resource.
- Need to maintain public access to the public trust waters.

### Group 3

- #1. Ensure the sustainable use of our water resources while confirming that the States retain authority over water use and diversions of Great Lakes waters.
- #2. Control pollution from diffuse sources into water, land and air.
- #3. Stop the introduction and spread of non-native aquatic invasive species.

Priority that should be added: Better coordination/identification of regulatory agencies.

### Related Concerns

- Concern about the federal government overriding state control.
- In order to make progress with the priorities, it is necessary to identify which agency ultimately has the authority to make regulatory decisions regarding the Great Lakes.
- Many of the problems addressed in the nine priorities are largely a result of ambiguity in management.
- Need to focus funding on top priorities.
- Public needs to be aware of Great Lakes issues: what they are and what can be done.
- Beach closures reduce Great Lakes visibility with public.
- Need to protect habitat throughout the watershed, not just the coastal zone.
- Need to address sewage overflow issues (and storm water).
- Without standardization of information gathering and sharing, other priorities are impossible to accomplish.
- Great Lakes need more than just money, policy changes are needed, too (ex: mercury).
- Great Lakes governors need to have a united voice for national issues that affect the Great Lakes (ex: mercury, coal-fired power plants).

## Appendix E: Breakout Session 2 Summary Notes

Combined Recommendations of Green Bay and Milwaukee Workshops:

Action Items for Addressing CGLG Priorities, Who Should Be Involved and Some Measures of Progress

**Editor's note:** Original wording from workshop flipchart sheets has been edited slightly for clarity. Similar or related recommendations from different groups at both workshops have been grouped together under the most general one, and duplications have been combined or deleted in some cases.

# **#1.** Ensure the sustainable use of our water resources while confirming that the States retain authority over water use and diversions of Great Lakes waters.

## Specific Actions

- Establish sovereignty regarding Great Lakes water
  - o Do not allow any further trade agreements that include water
  - o Pass Annex 2001 & approve; current laws don't protect agreement
  - Canada & the U.S. should sign a formal treaty to guarantee policies proposed by Council of Great Lakes Governors
- Pass laws to require water conservation
  - Provide market incentives for water conservation
  - o Implement conservation measures by inserting incentives within water pricing structure
  - Require habitat conservation in exchange for water consumption (just as is required for water diversion)
- Guarantee groundwater replenishment within the Great Lakes watershed
  - Support more research to gather groundwater data
  - o Identify, map and protect recharge areas
- Establish specific goals or objectives for reductions in storm water runoff
  - Provide tax incentives to reduce impervious surfaces
  - o Use storm water utility fees for storm water management
  - o Encourage use of rain barrels and rain gardens
- Ensure return of water to basin
  - Require that quality of water returned to the lakes is as good as the water taken out
  - Ensure that sustainable use includes reduction of toxics and management of recreational use
- Educate the public on significance of water cycle, recharge areas, aquifers, watershed, groundwater

## Who Should Be Involved

- Canada
- Citizen groups
- Council of Great Lakes Governors
- Elected officials at all levels
- International Joint Commission
- State departments of natural resources
- Universities

## Measures of Progress and Success

- Establishment of a treaty
- Monitoring that shows that water taken out of Great Lakes is of same quality as that taken out
- Increased water conservation

## **#2.** Control pollution from diffuse sources into water, land and air.

- Establish environmental regulations that can be implemented and enforced
  - Council of Great Lakes Governors should advocate for the U.S. EPA to fully implement the Clean Air Act Utility MACT for 90% reduction of mercury for 2008
  - o Increase penalties/hold entities responsible
  - Promote programs to protect human public health from adverse effects of pollution (*priority* #6) stress "healthy lake, healthy people"
  - o Control pollution in order to reduce beach closings
- Adopt a watershed approach and stop nonpoint-source pollution and wetland loss
  - Establish some sort of watershed authority that bases regulation on a geographic area rather than on political boundaries
  - Restore natural hydrology (examine effect of drainage tiles)
  - Promote buffer strips, better nutrient management, wetland protection and urban storm water management
  - o Involve private landowners
  - o Manage manure better on farm fields; establish mandatory regulations and enforce them
  - o Encourage lawns that do not require fertilizers
- Promote groundwater replenishment
  - Encourage low-impact development (designs that allow water to seep in)
  - o Support rain gardens/rain barrels (better home designs)
  - Establish groundwater replenishment zones
  - Encourage creation of permeable land
  - Require permeable paving/pavement
  - o Improve infiltration from impermeable development
- Fund long-term monitoring to ensure that problems are actually being solved (accountability)
  - Fund appropriate testing of rivers
- Support education
  - Use public education to encourage more people to be actively involved
  - Support a strong education program that explains issues to the general public (what needs to be done and why)
- Focus on land use as a way to improve water quality in the Great Lakes
  - Provide rebates or tax incentives for water conservation and improvements in agricultural practices
  - Establish a statewide preservation plan for hydric soils that reduce flooding

- Require buffers
  - Establish 100% funding for buffer strips to remove landowner burden
  - o Increase public awareness for need for buffer strips
- Increase standards for reducing phosphorus in soils tied to Total Maximum Daily Load (TMDL)
  - Establish alternative TMDLs in Wisconsin
- Manage/control shoreline development
  - Use a reward system to encourage municipalities to work together (incentive for revenue sharing) to keep development where it belongs
  - Protect undeveloped shoreline
  - Have a broad, inclusive discussion about costal land use and development
- Elect supportive officials and hold officials accountable

## Who Should Be Involved

- Farmers in Great Lakes states (need to be under same laws if their land is part of the same watershed)
- Governors
- School system (for public awareness)
- U.S. Department of Agriculture (but it needs to take a new approach)
- U.S. Environmental Protection Agency

## Measures of Progress and Success

- Water quality
- 100% funded buffer strips on 100% of waterways
- Hydric soil plan implemented and completed

## **#3.** Stop the introduction and spread of non-native aquatic invasive species.

- Strengthen local and federal invasive species laws
  - Approve the National Aquatic Invasive Species Act
  - Develop effective regulations on live species importation
  - o Establish more effective state laws to restrict invasive species
  - Enforce existing laws
- Regulate ballast waters
  - Neutralize ship ballast water to remove all invasive species
  - Need to control international ballast
  - o Establish a "Great Lakes-only" shipping fleet
- Fully fund and build the Asian carp barrier
  - Secure funding for Sanitary Canal barrier and assess economic impact of not building
- Fund research and monitoring to measure progress and success
  - Determine economic and environmental impacts of invasive species
  - o Research other routes of introductions of invasive species
  - Find uses for existing exotics
  - Manage fish quotas early need to recognize fluctuations caused by exotics

• Educate public about threat of invasive species – K-12, boating safety courses

## Who Should Be Involved

- Canadian Government
- Citizen watch groups
- Congress
- Educators
- Governors
- Interstate commerce
- Municipalities
- Sea Grant & universities
- Sport fishing groups
- Sportsmen and business associations
- State & provincial departments of natural resources
- U.S. Coast Guard
- U.S. Department of Agriculture
- U.S. Environmental Protection Agency

## Measures of Progress and Success

• No new exotics[!]

## #4. Enhance fish and wildlife by restoring and protecting habitats and coastal wetlands.

## Specific Actions

- Allocate more funding for the Coastal Zone Management Act
  - Apply Coastal Zone Management more broadly within the watershed (not just on Great Lakes coast)
- Adopt more comprehensive planning for fish and wildlife habitat
  - o Identify important conservation areas for protection
  - o Locate and protect groundwater recharge areas for Great Lakes
- Use cost-sharing to restore shoreline
- Ensure an even playing field within federal grant process
- More education[!]

## Who Should Be Involved

- Citizen groups
- Economic development groups
- Nonprofit groups
- State departments of natural resources
- Tribes
- U.S. Fish and Wildlife Service

## Measures of Progress and Success

None suggested.

# **#5.** Continue to reduce the introduction of persistent bioaccumulative toxics into the Great Lakes ecosystem.

## Specific Actions

- Control mercury emissions and uses
- Stop new introductions of PCBs
- Support research to identify new threats (e.g., PBDEs)

## Who Should Be Involved

No suggestions.

## Measures of Progress and Success

None suggested.

# #6. Promote programs to protect human health against adverse effects of pollution in the Great Lakes ecosystem.

## Specific Actions

- Continue programs already in place
  - Keep raw sewage out of Lake Michigan need to separate sewage from storm water
  - Obtain federal funding for big projects (such as Milwaukee sewer problem)
  - o Charge impact fee for new development that will increase water demands
  - Increase budgets for departments that monitor levels of harmful chemicals
- Increase public access to information about toxic releases
  - More proactive work to prevent other chemicals (such as PBDEs) from entering the environment (need to change approach from "innocent until proven guilty" to "guilty until proven innocent")
  - Restore the Public Intervener position in Wisconsin state government
  - Educate the public about contaminated fish by issuing advisories hand out advisories with fishing licenses

## Measures of Progress and Success

None suggested.

# **#7.** Adopt sustainable use practices that protect environmental resources and may enhance the recreational and commercial value of our Great Lakes.

- Establish better storm water standards
- Encourage more groundwater recharge practices
- Promote alternative energy wind, solar, hydro, biomass
- Support public outreach on sustainable uses target private landowners

## Who Should Be Involved

- Citizen groups
- Environmental groups
- Individuals
- Media
- Municipal governments
- Schools
- Volunteers

## Measures of Progress and Success

- Track beach closings and other parameters
- Track citizen assessment of water quality

# **#8.** Standardize and enhance the methods by which information is collected, recorded and shared within the region.

## Specific Actions

- Ensure that information is shared and used
  - Establish a common and easy way to share and collect data (often difficult to do with so many entities doing research)
  - Establish standardization guidelines so that data is gathered in a consistent way
  - Establish a central clearinghouse for information
  - Uniform management or uniform approach between regions and states
  - More funding for GIS initiatives
- Information needs to stop having political boundaries

## Who Should Be Involved

• Establish some sort of group (representing diverse stakeholders) that could decide on a system of standards for all agencies to use

## Measures of Progress and Success

None suggested.

# **#9.** Restore to environmental health the Areas of Concern (AOC) identified by the International Joint Commission as needing remediation.

- Make Areas of Concern a national priority
  - o Securing funding could jump-start implementation
- Develop mechanisms to deal with complacency
  - Provide incentives to local governments to implement RAPs
  - Support committees that are supposed to help implement RAPs
- Take each RAP and identify one priority to address first (community decides on priority)
  - o Local community to advocate addressing priority with local legislators

- Educate local citizens and decision makers
  - o Establish connection between health issues and toxic environment

### Who Should Be Involved

No suggestions.

## Measures of Progress and Success

None suggested.

## (#10.) Enhance education on Great Lakes issues on all fronts.

## **Specific Actions**

None suggested; however, see specific priorities above.

## Who Should Be Involved

No specific suggestions.

### Measures of Progress and Success

None suggested.

## Appendix F: Individual Responses – Comment Forms, Email and Letters

(Total Number of Respondents: 10)

## **Diversions of Water**

"I think the priorities are self-evidently desirable. I would like to add that Great Lakes' water should stay in the Great Lakes Basin. To divert water out of the basin could be disastrous to the Great Lakes' ecosystem. I would be particularly upset if diverted water is used on lawns! Xeriscaping should be the law for all ornamental uses, both in the basin and out."

# # # #

"With regard to the Great Lakes Charter Annex, I strongly believe we should prevent the diversion of Great Lakes water. I'm reminded of the historical precedent on how the timber of North America was treated. Of course it was never going to run out. Please do not let the fresh water supply of the Great Lakes be treated as cavalierly. Thank you – [name withheld]

# # # #

## Water Quality, Toxic Contaminants

"Tm expressing serious concern about the water quality of Lake Michigan particularly in the Milwaukee area. Serving in the military, I lived outside of Wisconsin for many years. I was shocked when making a trip to Bradford Beach near downtown Milwaukee on the terrible state of the beach. First, I found it odd no people were there anymore, it used to be a bustling beach where one found it difficult to even find a place to lay in the sand. After approaching the water, I can see why this beach had been abandoned. Green-black sludge covered the shoreline making it impossible to even reach the water. In addition to the physical appearance, the smell alone was sickening. I've returned several times to that area to walk along the lake trails however cannot just stand-by anymore looking at the terrible condition of the beach and the water quality.

"My wife and I will be permanently moving to the Milwaukee area soon and I told her that one of Milwaukee's greatest assets is the lake. I'm embarrassed for the city and the state to see our beaches in such a state. As Milwaukee as tries to rebuild downtown and boost the city as a desirable place to live, one would have to ask themselves, would they move near a lake in such disgusting condition?"

# # # #

"Coal fired power (electricity) plants should be required to upgrade to <u>best</u> technology available to reduce sulfur, mercury and other pollutants.

"All coal user pay say a 1¢/ton tax that is combine and use to <u>fund</u> clean coals burning technology research for all."

# # # #

"Lake Michigan and Green Bay need to be clean enough for future generations. Our children and grandchildren will thank us for this effort."

# # # #

## Invasive Species, Pollution

"Control exotic species at the source.

"<u>No</u> exotic fish, repticals [*sic*], birds, animals, insects & <u>plants</u> permited [*sic*] into WI, unless a public hearing is held and the benefit is worth the long term risk."

# # # #

"Our names are [*name withheld*] and [*name withheld*]. We are two Boy Scouts working on our Citizenship in the Community merit badge. We noticed an article in the *Kenosha News* dated August 26, 2004, requesting public comments about draft annex 2001 implementing agreement.

"We looked on the Web site listed in the article to get some background information. We think that we shouldn't send the water because of pollution and the zebra mussels that eat all of the food that the fish eat. The people requesting water should have known that there was no water in the Southwest region."

# # # #

## Lake Water Levels, Lakeshore Property Rights, Regional Coordination of Restoration Efforts

"First, thanks again very much for organizing and managing these workshops. I think it's an excellent first step in developing the dialogue between the public and the Governors' Council that will be needed to resolve all the issues facing us. That said, I'd like to share a few observations with you:

"1 - I felt locked into the nine priorities provided by the Council, as though they were dictating the problems to us. Several issues came up in the breakout groups that I sat in that don't fit neatly into any one of the nine priorities, for example fluctuating water levels, property owners' rights, defining the OHWM, and others. I think a better approach would be to develop a vision statement for the lakes, then solicit public comment on what has to be done to attain it.

"2 - No-one seems to be in charge of the overall effort. Mike Donahue told me later that the EPA has been charged with overall responsibility for the restoration program, which is fine, but right now there are hundreds of groups, organizations, and agencies involved and little co-ordination of their efforts. I think this needs to be a priority item, to develop that co-ordination so someone is actually steering the ship.

"3 – Many of the attendees at the Green Bay workshop were associated with the DNR, FWS, Sea Grant Institute, or other non-public organizations. Perhaps less than 50% of the attendees were actually 'the public'. Somehow we need to involve the public more. I think there's a tremendous reservoir of support out there if only we can get their attention and buy-in. I suggest studying what was done around Chesapeake Bay, or a PR consultant, or public-service TV spots, etc. Something! The program will limp until the public gets behind it.

"Our group prepared a list of what we think the priorities are which is somewhat different than the Governors' Council's. I've attached a Word document that spells them out [*appended below*]. And as I mentioned to you, our groups are anxious to help in any way we can to accomplish our common objectives, the ecological and economic health of the Great Lakes and the Great Lakes Basin. We may not agree on every detail, but we do all want clean water, healthy beaches, and a strong regional economy. We welcome any opportunity to work with you and the DNR."

# # # #

"Comments regarding the Council of Great Lakes' Governors' priorities of restoration and protection of the Great Lakes. Submitted by [*name withheld*] and [*name withheld*] representing:

- Wisconsin Lake Michigan Shoreline Chapter, International Great Lakes Coalition
- East Holland Citizens' League
- Lakes Church Lakes Shore Citizens' League

"The nine priorities listed by the Governors are very broad and do not provide for either specific actions to be taken nor for objective and quantitative measures for their attainment. Our groups therefore would like to submit the following as our suggestions for specific objectives. They are listed in our priority order. They do not correspond

directly to the Council's list – a given item may even relate to more than one of the priorities – but it isn't difficult to see where they fit.

- 1. **Protection of lakeshore property owners' rights.** Given that property owners are the first and often the most directly affected parties to any change in the status of the lakes, and also given that they pay very high taxes and receive few municipal services in return, property owners' rights are our first priority. Lawsuits now in progress in other states seek to restore riparian rights that were taken away from property owners without compensation in Ohio, and to defend those rights in Michigan. Specific steps must be taken to assure that a) riparian rights cannot be removed without due legal process and compensation at fair market value; b) the ordinary high water mark (OHWM) is clearly defined and measurable; c) the right of a property owner to sell, improve, or maintain his property be assured and protected; d) property taxes must be based on services received and potential impact on the environment, not on property value.
- 2. Water quality, meaning the control and reduction of pollution from non-point sources such as storm sewers and farmlands, and the strict regulation of sewage dumping by municipalities. All municipalities in the Basin must conform to a new and stringent non-dumping standard and sewage treatment facilities must be upgraded to meet that standard. There must be no exception. Federal money should be made available to do this as the municipalities cannot afford it themselves, and the effect of dumping is area-wide, not limited to one city. Water quality should be measured regularly at both fixed and randomly chosen sites along the lakeshore, including residential as well as municipal sites. Watersheds in the entire Basin must be regulated and monitored, not just those streams that flow directly into the lakes, because eventually they will also affect ground water and aquifers that supply the Lakes. Pollution that may result from causes such as birds/seagulls must be studied to determine its extent and impact, and specific remedial measures should be developed. Water quality standards must conform to those set forth in the Clean Water Act and should be standard across the entire Great Lakes Basin.

We should also include in this priority the need to control cladofora [*sic*], the stringy algae that infests our beaches. Studies need to be made to identify the cause for its presence in the lake and on our shorelines and determine a means to eliminate it.

3. Water levels. Since high water levels can lead to serious erosion and property damage along the shoreline, procedures must be put in place to control them. Considerable data is already available that defines how much shoreline damage is done during high water periods and the cost to control the level. Such controls may include new or modified control structures in various places in the Basin. The International Joint Commission and the U.S. Army Corps of Engineers must be involved, one of the actions they should take is to review their policy for controlling Lake Superior water levels so as not to adversely impact Lakes Michigan-Huron, as has happened in the past. Specific proposals have been submitted to them, they should act upon them immediately before another high-water period arrives.

Low water also presents a problem. Not only are shipping and boating affected but there may be a correlation between the growth of cladofora [*sic*] and zebra mussels. Low water also causes the drying of wetland areas. It too must be managed and controlled.

- 4. **Exportation of water outside the Basin** should be prohibited 100% unless that water can be replaced or returned to the lake it was taken from.
- 5. **Control of non-native species**, meaning the reduction or elimination of those already here, such as zebra mussels, and the prevention of any new invasions, such as by bighead carp. Not all non-native species may be undesirable salmon are a prime example, so each species' ecological impact and interrelationships must be studied and assessed.
- 6. **Protection of unique plant and animal life and the environment(s)** needed to support them. The Great Lakes riparian zones constitute unique biomes and habitats. More extensive scientific study is needed to identify the unique biological memberships and relationships that exist in these riparian zones.

"Our groups also feel that the Council should act quickly on the suggestions submitted to it, with decisions and detailed plans available for public review by early in 2005 and implementation beginning by the end of 2005."

# # # #

## Appendix G: Feedback via Wisconsin Sea Grant Website

www.seagrant.wisc.edu/Feedback/Default.aspx?form=governors

#### INSTRUCTIONS

We highly recommend that you print this form and compose your answers in a word processing program. You can then return to this website and cut and paste your responses into the fields provided. This will provide you with a backup of your responses in the event that they are lost during transmission or if there is some other technical problem.

#### Background

On October 1, 2003, the Council of Great Lakes Governors outlined nine broad priorities to guide Great Lakes restoration and protection efforts (see list below). Congress is presently reviewing a number of bills that may provide large-scale, long-term funding for state-implemented programs for restoring and protecting the Great Lakes. On behalf of the Council of Great Lakes Governors, the Great Lakes Commission is soliciting public feedback and input on development and implementation of the council's priorities from each Great Lakes state.

On behalf of the commission and the council, the University of Wisconsin Sea Grant Institute is requesting your feedback on the restoration priorities developed by the Council of Great Lakes Governors and input regarding Wisconsin's most important Green Bay and Lake Michigan restoration and protection priorities. The commission will combine the feedback and input from Wisconsin with that received from the other Great Lakes states and share the results with Great Lakes leaders and the entire community of stakeholders in the interest of promoting consensus and unity of purpose in Great Lakes restoration and protection documents are being posted on the Great Lakes Commission Web site at www.glc.org/restwkshp.

#### The deadline for comments is Aug. 31, 2004.

Thank you for taking the time to share your thoughts with us. All comments will be compiled and forward to the Great Lakes Commission without attribution or any identification of the source.

## Responses Received 8/23-31/04 (Total Number of Respondents: 12)

1. What do you consider to be the major restoration and protection issues or needs for Lake Michigan? If each fits under one or more of the council's nine priority areas (see list), please indicate which one(s) by priority number.

- ▶ Priorities #1 and #3/#4. Unfortunately, the arguement [*sic*] that Lake Michigan water should stay in the basin may be difficult to make if Great Lakes communities continue to treat it as sewerage disposal site.
- ► I attended the public event at UW-Milwaukee this month and did part of the breakout activity, during which I indicated that I thought that all 9 items on the list were very much intertwined.

Taking sustainability [*sic*], it would not happen without authority of those in the watershed, there being protections from unhealthy pollution as in #2, 3 & 4, and #5, 6 & 7 if one considers non-natives to destroy the native systems that have their habitates [*sic*] destroyed by lazy development in areas of concern, having accessible numbers is necessary for all proposals, back to sustainability with #9.

I think that all pollutants' uses should tightened down, including fossil-fueled cars and salt. It may mean building heated bridges and roadways like is done in Europe where they have worse pollution problems, but those infrastructure features will last a lot longer. If these problems are to be controlled, stronger controls must be put in place. That has always meant government, of, for, and by the people. Private sector hasn't gotten it done, so they best get on board to limit problems.

Since most larger harbors have had industrial activities that render them areas of concern, consider establishing a standard harbor redesign that uses a low-head dam/breakwater to contain contaminants and allow them to settle, with wind, wave, and solar energy power generation, hoisting devices for recreational boats, and off-shore ship docking and unloading as is being done in other world-wide new harbors to save estuaries.

I feel the first item is of critical importance. Sustainable use is the key term --- control against diversions is essential --- water abuse situations in other areas must not be allowed to threaten the Great Lakes.

▶ Priority #1: No diversions.

2. Are there other conservation and restoration priorities for Lake Michigan's basin that you wish to share with the Council of Great Lakes Governors?

- ▶ It is important to think 'basin' --- this means that the health of the rivers and creeks that feed the lakes is of paramount concern. Land use cannot be overlooked. The upstream effect appears to be minimized [*sic*] and should have a higher profile
- You might want to explicitly address the issue of stormwater and sanitary water being discharged to Lake Michigan. Also, you might want to address the issue of protecting the lakes from terrorist attacks. I don't know if there are any WMD that could make the lake water undrinkable but it seems to me to be something that should be looked at.

## 3. What do you consider to be the top three priorities from the governors' list for Wisconsin waters of Lake Michigan?

#1 Ensure sust	ainable use/confirm state authority over diversions of Great Lakes waters.
	55% (5 votes)
SECOND PRIOR	
#2 Promote pro	ograms to protect human health against pollution in the Great Lakes ecosystem
	11% (1 vote)
#4 Continue to	reduce the introduction of persistent bioaccumulative toxins
	11% (1 vote)
#5 Stop the int	roduction and spread of non-native aquatic invasive species.
	11% (1 vote)
#9 Adopt susta	inable use practices that protect environmental resources *
	11% (1 vote)
THIRD PRIORI	<u>TY</u>
#3 Control poll	ution from diffuse sources
	33% (3 votes)
#9 Adopt susta	inable use practices that protect environmental resources *
	11% (1 vote)

- 4. For each priority, please identify:
  - A. Some action items specific to Lake Michigan needed to address the issue.
  - B. Which interest groups should be involved in implementing these action items (e.g., local government, businesses, industries, environmental organizations, schools, resource management agencies, etc.).
  - C. Some measures of progress and success in satisfying the priority.

You don't need to respond to every priority; however, please do so for your top three priorities at minimum.

PRIORITY #1: Ensure the sustainable use of our water resources while confirming that the States retain authority over water use and diversions of Great Lakes waters.

#### 1A. Specific actions needed

- Education programs/brochure required for all users of Lake water to know value of the lake and impact ie. in SDWA consumer reports, and information for shoreline owners.
- If people want water they should live inside the watershed. Great Lakes water should not leave its continental boundaries. Too much sprawl diminishes this resource. Tell the easterners that move west to learn to plant cactus.
- Retain strict control over diversions. Allowing water flows out of the basin only encourages uncontrolled development.

Encourage communities to use water more wisely. Frequent washing of cars or watering of lawns is a waste of water.

#### 1B. Who should be involved?

- ► A unified front is needed by utilities, townships, cities, and research agencies to provide and present this information to the public.
- ► General education about water quality dynamics should become standard in our schools -- especially in middle and high school -- then every citizen should feel the need to participate in protecting our water resources at some level -- citizen action group should continue to grow and be more active.
- Laws should be passed in the US Congress and in the Canadian counterpart. Education at the grade school level is probably the best way to change people.
- ▶ US and Canadian governors and the IJC.

#### 1C. Some measures of progress/success

- Survey through health provider; Survey through utility.
- ► This is important, but if you take care of the pollution problem, then you'll help yourself with the health problem.
- We need to be able to swim freely at all times in our lakes --if we can't we have a problem.

## PRIORITY #2: Promote programs to protect human health against adverse effects of pollution in the Great Lakes ecosystem.

#### 2A. Specific actions needed

- Education and advisories need to be continued to inform consumers of fish of the risks associated with consuming specific types of fish.
- Require that all development (inside the watershed) that would normally increase stormwater runoff be redesigned to maintain stormwater where it falls.

#### 2B. Who should be involved?

- Local health departments to survey low income individuals on fish consumption
- Regional and local planners

#### 2C. Some measures of progress/success

• Obtain statistics on people consuming fish and awareness of health problems

#### PRIORITY #3: Control pollution from diffuse sources into water, land and air.

#### 3A. Specific actions needed

- ► A grass roots effort is needed to get legislative staff (both state & federal) to develop and vote for controls/rules to reduce sources of pollution particullarly [*sic*] when the sources of pollution is not normal and crossed state lines.
- Our air pollution and nonpoint source pollution laws need strengthening.
   We need to give people viable alternatives in terms of transportation and energy use. These alternatives must be non-polluting.

#### 3B. Who should be involved?

- ► Business action teams should take the lead
- State, federal, and local individuals
- ► The Federal government;

Inventors and/or universities in collaboration with venture capitalists.

#### 3C. Some measures of progress/success

- Pass guidance and laws to control contamination;
   Educate people on process (cradle to grave pathways of contaminants) and alternatives to decrease contamination.
- Reduced toxics being released into the environment. Cleaner air and water. Fewer cars on the road.

## PRIORITY #4: Continue to reduce the introduction of persistent bioaccumulative toxics into the Great Lakes ecosystem.

#### 4A. Specific actions needed

- Continued education of people impacted by toxics and relative risks to other sources of toxics in their life.
- ► See number 3 [#3A-2] above.

#### 4B. Who should be involved?

• Local health staff and research agencies.

#### 4C. Some measures of progress/success

 Survey results of people impacted by toxics; Brochure/online information.

#### PRIORITY #5: Stop the introduction and spread of non-native aquatic invasive species.

#### 5A. Specific actions needed

- ► Hold the Army Corps of Engineers to their budgets to prevent invasive species from traveling.
- ▶ The dumping of balast [*sic*] water in the Great Lakes needs to be better controlled.

#### 5B. Who should be involved?

- ▶ Members of Congress representing the Great Lakes states and that gutless haircut currently in the oval office.
- ► State, federal, and international representatives.

#### 5C. Some measures of progress/success

• Pass laws to regulate ballast water.

#### PRIORITY #6: Enhance fish and wildlife by restoring and protecting habitats and coastal wetlands.

6A. Specific actions needed

No Responses.

6B. Who should be involved?

No Responses.

6C. Some measures of progress/success

No Responses.

PRIORITY #7: Restore to environmental health the Areas of Concern (AOC) identified by the International Joint Commission as needing remediation.

7A. Specific actions needed

No Responses.

7B. Who should be involved?

No Responses.

7C. Some measures of progress/success

No Responses.

## PRIORITY #8: Standardize and enhance the methods by which information is collected, recorded and shared within the region.

#### 8A. Specific actions needed

- ► Continue to foster cooperation amoung [*sic*] interested parties
- 8B. Who should be involved?
  - ▶ Universities should take the lead with citizen involvement
- 8C. Some measures of progress/success
  - ▶ Identify sucessful [*sic*] projects utilizing teamwork amoung [*sic*] different agencies, states, and countries.

## **PRIORITY** #9: Adopt sustainable use practices that protect environmental resources and may enhance the recreational and commercial value of our Great Lakes.

#### 9A. Specific actions needed

▶ Share information amoung [*sic*] interested parties to identify good strategies for management of the Great Lakes.

#### 9B. Who should be involved?

• All interested agencies in the Great Lakes region.

## 9C. Some measures of progress/success

• Development of laws and guidance to better manage the lake systems.

#### Do you wish to be notified when a copy of our report to the Great Lakes Commission is available?

Yes, please.

 No, thank you.

 33% (3 responses)

 No Response

 22% (2)

#### Email Address:

4 responses [withheld to protect anonymity]

Fax (if you don't have an email address) No Response

## **Additional Comments**

None

## Appendix H: 'Summary and Conclusions' from the Joint Workshop on Lake Superior Restoration and Protection Priorities

Held 12:30-5 p.m. Wednesday, June 30, 2004 Kirby Ballroom, University of Minnesota–Duluth Co-Sponsored by the Minnesota and Wisconsin Sea Grant Programs

There appeared to be general acceptance of the governors' priorities, although the two priorities considered most important for the Lake Superior basin were:

- Enhance fish and wildlife by restoring and protecting habitats and coastal wetlands.
- Adopt sustainable use practices that protect environmental resources and may enhance the recreational and commercial value of our Great Lakes.

Although these priorities were ranked highest, they were closely followed by the priorities:

- Stop the introduction and spread of non-native aquatic invasive species.
- Control pollution from diffuse sources into water, land, and air.

Two very strong themes emerged during discussion of the governors' nine priorities. These include:

- 1. Education and outreach should be stated explicitly in the priorities.
- 2. Lake Superior is unique relative to the other Great Lakes, in that there is still a great deal to protect as well as restore. Protection needs to be recognized as a priority for Lake Superior along with restoration.

Some additional major themes drawn from the discussions involving the nine Council of Great Lakes Governors' priorities are the following:

- 1. Ensure the sustainable use of our water resources while confirming that the States retain authority over water use and diversions of Great Lakes waters by first and foremost preserving the existing water supply.
- 2. Promote programs to protect human health against adverse effects of pollution in the Great Lakes ecosystem by continuing to support legislation to prevent contaminants from entering the water cycle and to work toward reducing the human health and environmental risks we have created.
- 3. Continue to reduce the introduction of persistent bio-accumulative toxics into the Great Lakes ecosystem by working toward the elimination of the need for fish advisories. Cleaning existing trouble spots is not going to solve the atmospheric pollution problem. Rather a more comprehensive federal atmospheric pollution policy that deals with persistent pollutants is necessary.
- 4. Control pollution from diffuse sources into water, land and air by emphasizing the importance of protection in addition to restoration as a goal. The issue of air pollution and mercury is also a problem that goes well beyond the borders of local communities, but needs to be addressed.
- 5. Efforts to stop the introduction and spread of non-native invasive species need to consider terrestrial as well as aquatic invasive species. Most importantly, a Great Lakes-wide coordinated management effort that prioritizes control and prevention should be in place.

- 6. Enhance fish and wildlife by restoring and protecting habitats and coastal wetlands by focusing on protection with a long term perspective. The Lake Superior basin has far more protection opportunities than the lower Great Lakes. There needs to be better planning and enforcement of local land use policies that will focus on long term watershed/ecosystem protection. Coordination of programs among jurisdictions is essential to success.
- 7. Restore to environmental health the Areas of Concern (AOC) identified by the International Joint Commission as needing remediation by accelerating movement toward delisting these areas. The criteria for delisting these sites are currently inadequate and should move toward a common methodology. There should be better monitoring and an effort to protect high quality habitats/areas within AOCs while protecting human health from exposure to toxicants.
- 8. Standardize and enhance the methods by which information is collected, recorded and shared within the region by coordinating efforts to collect and share information in accordance to a defined sampling, analysis, and reporting methodology. Methods also need to be developed for evaluating cumulative impacts as well as for detecting environmental changes.
- 9. Adopt sustainable use practices that protect environmental resources and may enhance the recreational and commercial value of our Great Lakes by first defining "sustainable use" and next providing for a comprehensive growth management strategy that protects the basin. The way we evaluate economics must include ecological considerations (e.g., re-define the Gross National Product to include the value of sustainability).

The Lake Superior basin has a strong base of committed public and private sector groups that are hoping to build a network throughout the Great Lakes basin to jointly support preservation of natural resources, restoration of degraded areas, better planning for future land uses, stronger enforcement of regulations, and a cohesive methodology for monitoring and assessing data that will support and improve the promotion of a more sustainable Great Lakes basin.

## Appendix I: Lake Michigan Workshops Planning Committee

## University of Wisconsin Sea Grant Institute

Anders Andren, Director
James Hurley, Assistant Director for Research and Outreach
Stephen Wittman, Communications Manager
Victoria Harris, Water Quality & Habitat Restoration Specialist, UW-Green Bay
James Lubner, Education Outreach Coordinator, UW-Milwaukee

## Wisconsin Department of Natural Resources

**Charles Ledin**, Director, Office of the Great Lakes **Linda Talbot**, Water Resources Specialist, Office of the Great Lakes

## Wisconsin Department of Administration

Michael Friis, Manager, Wisconsin Coastal Management Program Alberto Vargas, Intergovernmental Relations, Wisconsin Coastal Management Program

## Appendix J: Constituent Group Representatives Receiving Special Invitations

(N = 400)

#### Great Lakes Forever (32 individuals)

Concerned Citizens of Newport (2) Fox-Wolf Watershed Alliance Friends of Milwaukees Rivers Green Bay Metropolitan Sewerage District (2) Groundwater Guardians Milwaukee Community Service Corps Milwaukee Metropolitan Sewerage District (2) Ozaukee Co. Planning, Resources & Land Management Dept. Pier Wisconsin (4) Sierra Club-Midwest Office The Nature Conservancy Natural Resources Conservation Service, USDA UW-Extension (2) UW-Extension Environmental Resources Center **UW-Extension UW-Stevens Point** UW-Stevens Point Center for Watershed Science & Education Wisconsin Assn. of Lakes Wisconsin Coastal Management Program (2) Wisconsin River Alliance Wisconsin Wetlands Assn.

## Green Bay Science & Technical Advisory Committee (27)

Brown Co. Land Conservation Dept. (2) Fox-Wolf Basin Alliance Fox-Wolf Basin Alliance NPS Modeler Green Bay Metropolitan Sewerage District (2) Green Bay Press Gazette reporter Industry consultant Oneida Tribe Oneida Tribe environmental planner U.S. Army Corps of Engineers U.S. Environmental Protection Agency Region 5 U.S. Fish & Wildlife Service biologist U.S. Fish & Wildlife Service ecological services U.S. Fish & Wildlife Service fisheries biologist UW-Green Bay emeritus ecologist UW-Green Bay emeritus limnologist UW-Green Bay environmental policy researcher UW-Green Bay limnologist UW-Green Bay resources economist UW-Green Bay soils scientist UW-Green Bay statistician UW Sea Grant water quality specialist

Wisconsin Dept. of Natural Resources Northeast Region water leader Wisconsin Dept. of Natural Resources wastewater engineer Wisconsin Dept. of Natural Resources water resources supervisor, Fox River Basin Lake Michigan Fisheries Forum (80) Bay de Noc Charters Captain Bob Charter Fishing Dumper Dan Charter Fishing Green Bay Metropolitan Sewerage District Haasch Services Happi Hooker Charters Hickey Brothers Fisheries Kirsh Foundry Lake Michigan Commercial Fishing Board Reel Action Charters Sea Dog Charters Susie Q Fishing Charters U.S. Fish & Wildlife Service (3) UW Great Lakes WATER Institute UW Sea Grant aquaculture specialist UW Sea Grant education specialist UW Sea Grant fisheries specialist UW Sea Grant water quality specialist UW-Milwaukee Aquaculture Institute Waushara Charters Wisconsin Dept. of Natural Resources (14) Wisconsin Commercial Fisheries Board

#### Lakeshore Natural Resources Partnership (55)

Wisconsin Dept. Agriculture, Trade & Consumer Protection

Wisconsin Federation of Great Lakes Sport Fishing Clubs

Agricultural Heritage & Resources, Inc. Bay-Lake Regional Planning Commission Calumet Co. Land & Water Conservation Dept. Centerville Cares City of Algoma Mayor's Office City of Manitowoc Engineering Dept. Cofrin Center for Biodiversity Door Co. Environmental Council Door Co. Land Trust Door Co. Land Use Forum Friends of the Ahnapee Trail GAT volunteer Glacierland Resource Conservation & Development

U.S. Fish & Wildlife Service ecological services (3) Historical & Environmental Learning Preserve Institute for Rural America Kewaunee Co. Land & Water Conservation Dept. Manitowoc Co. Executive (2) Manitowoc Co. Lakes Assn. (2) Manitowoc Co. Soil & Water Conservation Dept. Rural Land Legacy Committee Sevastopol School The Nature Conservancy The Ridges Sanctuary UW-Extension basin educator UW-Extension community development educator, Door Co. UW-Extension land use education specialist UW-Extension Northeast NPM regional specialist Wisconsin Dept. of Natural Resources drinking & groundwater specialist Wisconsin Dept. of Natural Resources groundwater specialist Wisconsin Dept. of Natural Resources wildlife biologist Wisconsin Green Party Woodland Dunes Nature Center

#### Lower Fox Basin Partnership Team (52)

1000 Islands Environmental Center Appleton Dept. of Utilities Baird Creek Parkway Foundation (2) Bay-Lake Regional Planning Commission (2) Brown Co. Conservation Alliance (2) Brown Co. Homebuilders Assn. Brown Co. Land Conservation Dept. Brown Co. Planning Commission Brown Co. Port & Solid Waste Dept. Calumet Co. Land Conservation Dept. East Central Regional Planning Commission (2) Farm Bureau Foth & Van Dyke Fox/Wolf Rivers Environmental History Project Fox-Wolf Watershed Alliance Freelance outdoors writer Friends of the Fox Green Bay Area Chamber of Commerce Green Bay Metropolitan Sewerage District Kaukauna Electric Commission Lower Fox Dischargers Assn. Natural Resources Conservation Service, USDA Northeast Wisconsin Woodland Owners Assn. Oneida Tribe of Indians (5) Outagamie Co. Land Conservation Dept. Outagamie Co. Zoning U.S.Fish & Wildlife Service (2) UW Sea Grant water quality specialist **UW-Extension** UW-Green Bay

Wisconsin Dept. of Natural Resources (11) Winnebago Land & Water Conservation Dept.

#### Milwaukee River Basin Partnership Team (54)

16th Street Community Health Center, Milwaukee Audubon Society Big Cedar Lake Property Owners Assn. Bureau of Land Management, U.S. Dept. of the Interior Citizens for a Better Environment City of Cedarburg City of Glendale City of Mequon City of Milwaukee City of West Bend Conrad Technologies Dittmar Realty, Inc. Federation of Environmental Technologists Fire Ridge Golf Course Friends of Milwaukee's Rivers Greater Milwaukee Convention & Visitor Bureau Growing Power Keep Greater Milwaukee Beautiful, Inc. Mayes -Wilson Associates Menomonee Valley Partners Metropolitan Assn. of Realtors, Milwaukee Metropolitan Builders Assn. (2) Milwaukee Co. Parks, Recreation & Culture Dept. Milwaukee Community Service Corps Milwaukee Metropolitan Sewerage District Milwaukee Urban Garden National Park Service, Milwaukee Natural Resources Conservation Service, USDA Ozaukee Co. Farm Bureau Ozaukee Co. Land Conservation Committee Ozaukee Co. Planning, Resources & Land Management Dept. (2) Ozaukee Washington Land Trust Pier Wisconsin (3) **River Revitalization Foundation** Riveredge Nature Center Sierra Club-Great Waters Group Southeast Wisconsin Regional Planning Commission Urban Ecology Center Urban Open Space Foundation UW -Extension Basin Education Program UW-Milwaukee Saukville Field Station Walleyes for Tomorrow Washington Co. Land Conservation Commission Wisconsin Dept. of Natural Resources Southeast Region (2) Wisconsin Electric (WE) Energies Wisconsin Wastewater Operators Assn. Wisconsin Woodland Owners Assn.

#### Sheyboygan River Basin Partnership Team (26)

Alpha Terra Science, Inc. (2) Earth Tech (2) Maywood Environmental Park Natural Resources Conservation Service, USDA (3) Northern Environmental (2) Sheboygan Co. Conservation Assn. Sheboygan Co. Land Conservation Dept. Sheboygan Co. Planning Resource Dept. (4) Sierra Club UW Extension Sheboygan River basin educator (3) Wisconsin Dept. of Natural Resources Milwaukee & Sheboygan River Basins land leader Wisconsin Dept. of Natural Resources Sheboygan water leader Wisconsin Dept. of Natural Resources South Sheboygan water team leader Wisconsin Dept. of Natural Resources Southeast Region land leader

#### WDNR's Urban Growth Boundary list (27)

Audubon Society Bay-Lake Regional Planning Commission Citizens at large (4) District Con. NRCS Marinette Co. Forestry (2) Marinette Co. Land & Water Conservation Dept. Marinette Co. UW-Extension Oconto Co. Lakes Assn. Oconto Co. Land Conservation Dept. Oconto Co. Natural Resources Conservation Service, USDA Oconto Co. UW-Extension (2) Regional Real Estate Specialist Snowmobile Club Trout Unlimited (2) U.S. Fish & Wildlife Service U.S. Fish & Wildlife Service UW-Extension **UW-Marinette** Wisconsin Dept. of Natural Resources (2) Wisconsin Dept. of Natural Resources forester Wisconsin Coastal Management Program

#### Special Advisory Invitations (47)

Office of Green Bay Mayor Schmitt Office of Milwaukee Acting Mayor Pratt State Rep. Bies, Sister Bay State Rep. Colon, Milwaukee State Rep. Cullen, Milwaukee State Rep. Gard, Peshtigo State Rep. Gottlieb, Port Washington State Rep. Honadel, South Milwaukee State Rep. Jensen, Waukesha State Rep. Jensen, Waukesha State Rep. Krawczyk, Green Bay State Rep. Kreuser, Kenosha

State Rep. Krug, Milwaukee State Rep. Krusick, Milwaukee State Rep. Ladwig, Racine State Rep. Lasee, Green Bay State Rep. Lehman, Racine State Rep. Montgomery, Green Bay State Rep. Morris, Milwaukee State Rep. Nischke, Waukesha State Rep. Richards, Milwaukee State Rep. Sinicki, Milwaukee State Rep. Taylor, Milwaukee State Rep. Turner, Racine State Rep. Van Akkeren, Sheboygan State Rep. Van Roy, Green Bay State Rep. Wasserman, Milwaukee State Rep. Weber, Green Bay State Rep. Williams, Milwaukee State Rep. Young, Milwaukee State Rep. Zepnick, Milwaukee State Rep. Ziegelbauer, Manitowoc State Sen. Carpenter, Milwaukee State Sen. Coggs, Milwaukee State Sen. Cowles, Green Bay State Sen. Dave Zien, Eau Claire State Sen. Hansen, Green Bay State Sen. Kedzie, Elkhorn State Sen. Leibham, Sheboygan State Sen. Moore, Milwaukee State Sen. Plale, South Milwaukee U.S. Rep. Green U.S. Rep. Kleczka U.S. Rep. Petri U.S. Rep. Ryan U.S. Rep. Sensenbrenner U.S. Sen. Feingold U.S. Sen. Kohl

#### **General Announcements Published & Posted**

Great Lakes Commission website Great Lakes Information Network "Announce" email list (939) Lake-Link.com *News* website Salmon Unlimited *Hook 'n Line* newsletter Salmon Unlimited-Wisconsin newsletter *The Journal Times*, Racine *The Milwaukee Journal Sentinel* UW Sea Grant Institute website UW Sea Grant Littoral Drift newsletter (~1,000) UW-Green Bay Log newsletter for faculty & staff Wisconsin Dept. of Natural Resources WDNR News website Wisconsin Coastal Management Program website